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I.A.S.
Institute for Applied Socio-Economics
Novalisstrasse 10
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Phone +49-30-2 82 10 47
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Rough currency conversion rates

One European Currency Unit (ECU) was roughly equivalent to the following amounts of national currencies (28 November 1997):

Belgium	BEF	40 94
Denmark	DKK	6.64
Germany	DM	1.98
Greece	GRD	311.05
Spain	ESP	167.75
France	FRF	6.64
Ireland	IEP	0.76
Italy	ITL	1,943.30
Luxembourg	LFR	40.94
Netherlands	NLG	2.24
Austria	ATS	13.97
Portugal	PTE	202.64
Finland	FIM	6.00
Sweden	SEK	8.70
United Kingdom	GBP	0.67

EMPLOYMENT OBSERVATORY
Trends

The Journal of the European System of Documentation, Evaluation and Monitoring on Employment Policies (SYSDEM)

No. 29, Winter 1997

Trends provides a comparative and in-depth overview of selected policies and developments in the labour markets of the Member States on the basis of articles provided by the SYSDEM correspondents. It appears twice a year and is published in English, French and German.
SYSDEM is one of the networks of the European Employment Observatory (EEO) and is administered on behalf of the European Commission (DG V) by I.A.S., Institute for Applied Socio-Economics.

Contents

The articles in *Trends* reflect the opinions and analyses of the SYSDEM correspondents and do not necessarily represent the opinions or views of the European Commission. The signed articles are the sole responsibility of the author(s).

Forecasting Employment and Unemployment Trends in the Member States: an Introduction*

The essays in this issue of "Trends" deal for each of the 15 Member States with:

- the availability and range of medium- to long-term prognoses,
- forecasts of labour supply, labour demand and unemployment trends, and
- some brief conclusions on the problems facing employment and labour market policy in the future.

This introduction to the subject matter discussed in the individual articles has been conceived by the Secretariat as a guide for the reader so as to facilitate access to the topic of labour market forecasting.

The availability of national forecasts

The first section of each report provides information on the institutions active in the field of forecasting in the respective country and their most important publications. While short-term (business-cycle) forecasts are produced in all countries, the situation regarding medium-term (around five years) and longer-term (10 years and above) prognoses varies considerably. In some countries, numerous medium- and long-term prognoses of labour market trends are produced by various public and private institutions, whereas in a number of Member States the infrastructure in this respect is non-existent or rudimentary. This is particularly true of southern European countries such as Greece, Italy and Spain. Consequently, the correspondents from these countries were in some cases obliged to draw on work done, for instance, by the Commission.

In some Member States with a longer tradition of prognosis and quantification, labour market forecasts are conducted not only for the domestic economy, but also for other EU and non-EU countries. In addition to econometric procedures, scenario techniques are also increasingly being used, while macroeconomic data is often supplemented by information derived from panel studies.

Against this background, it is certainly worth while reconstructing the mutual interrelationships between the forecasts developed by national and European institutions. For it is clear that the medium-term trends of individual European economies are to a significant extent derived from the internal dynamics of the EU as a whole. It is therefore only natural that in a number of Member States labour market trends are now being presented in the form of alternative scenarios, each of which is based on different assumptions about global and European economic developments.

Labour market trends

Labour market trends are characterised with the help of the trend in the development of:

- labour supply,
- labour demand (actual employment), and
- unemployment.

Labour supply

The supply of labour – i.e. the number of people seeking gainful employment – results largely from demographic and behavioural trends. The population of working age provides the basis here. This, in turn, is determined by *natural population trends* (births and deaths) and migration (immigration minus emigration). While natural population trends in EU countries can be extrapolated with the help of more or less highly developed demographic models and can be considered a relatively reliable prognosis variable, migration flows are not always explicitly included. The uncertainties and the margin of error in forecasting migration are too great. This is due in particular to the fact that the magnitude of migration depends both on future economic trends at home and abroad and on changes in political parameters.

- In most EU countries, the natural population trend is upward. The exceptions here are Germany, Italy and Greece. However, in Germany, at least, the natural decline in population is more than compensated for by net immigration.
- With the exception of Italy, positive, albeit slight, population growth is forecast for all the Member States over the next ten years. The rate of growth is expected to be more pronounced only in Ireland, the Netherlands and the United Kingdom.
- According to the prognoses going beyond 2010, however, there are certain countries in which the population could then decline. A marked fall in the German population is expected from 2010.
- In virtually all the Member States, the forecast is for a rise in the average age of the population as a whole and of the population of working age. Accordingly, the "age coefficient" (ratio of the over-60s to the under-20s) and the "dependency coefficient" (ratio of the population not of working age to that of working age) are expected to rise; exceptions are the UK and Ireland.

The prognoses for the population of working age – the definition of which, incidentally, varies between countries – serve as a basis for forecasts of *participation rates*. These depend (procyclically) on economic development. Also of importance are educational trends and the institutional parameters for labour market exit.

- The national reports indicate a further decline in participation rates among the under-25s (exception: United Kingdom).
- Particular attention is paid to the relationship between male participation rates and likely changes in the institutional parameters for the transition from working life to re-

* By Frank Stille, EEO scientific programme manager.

tirement. In some countries, the participation rates in the age categories affected are expected to stabilise or even increase.

- The declining participation rates of men, which are characteristic for the overwhelming majority of the Member States, are more than offset by the continuing increase in female participation rates. The rising proportion of women in the active population is seen as the predominant trend in all Member States. Thus, the gap between male and female participation rates is narrowing. In some countries, a virtual equalisation, or indeed a higher female than male participation rate (Belgium), is expected.
- There are currently substantial differences between the female participation rates in EU countries. Rates of 75% and higher are recorded in the Scandinavian countries, compared with less than 50% in the southern European countries (but not in Portugal) and in Ireland and Luxembourg. However, in those countries with a low initial level, female participation rates are expected to grow at an above-average rate.
- All in all, at least a slight increase in labour supply is expected in all Member States for a period of around ten years. In Ireland, and particularly in the United Kingdom, labour supply growth will be more pronounced.

Labour demand

Overall trends

Forecasts of overall employment trends are based on prognoses of macroeconomic growth and labour productivity. These initial assumptions are only quantified in a few of the national reports: very positive economic growth is expected in Greece, the Netherlands and particularly in Ireland. Otherwise the (implicit) annual average growth rates for a period of around ten years are of the order of 1.5 to 2%. In a number of Member States, the uncertainty surrounding the prediction of economic growth in the future is taken into account in the form of scenarios, which then generate very different trends in terms of employment. Scenarios are also frequently presented with the aim of underlining the urgency of certain political decisions.

- Employment is expected to grow in all countries, with the exception of Austria, over the next ten years, although, at no more than 0.6%, the annual average rate of growth remains relatively subdued. A significantly steeper employment-growth trajectory is only thought probable in Denmark (1%), Greece (1.5%) and particularly in the Netherlands (2%) and Ireland (more than 2%).
- Some of the national reports give details on the sub-category "self-employment". Where this is the case, strong expansion is expected, particularly in the United Kingdom. The self-employment trend is negative only in Greece, due to the declining importance of agriculture there.

Specific trends

While significant differences emerged from the national reports concerning the growth of overall employment, there is a broad consensus in the case of the following specific trends:

- In *sectoral* terms, an increase in the relative importance of tertiary-sector employment, in particular private services (producer services, health, hotel and catering, etc.), is expected in all countries. In some cases, the United Kingdom for example, security and personal services could constitute the only expanding branches offering employment opportunities for the low skilled. Expectations are generally positive for financial, transport and communications services. In most countries, the prognoses for non-market (public) services are negative.
- In terms of *occupations and qualifications*, too, there is widespread agreement on expected trends. Blue-collar workers will decline as a share of the total, whereas knowledge-based, high-skill occupations will continue to gain in importance. Management, technical services, organisation and consultancy are the activity areas of the future. Net job losses are to be expected, by contrast, in sales and simple office activities. In all countries, the trend towards better initial training and further vocational training is considered stable.
- *Women* will continue to significantly expand their *share of total employment.* This secular trend is being supported by the above-mentioned sectoral and occupational developments.
- *Part-time work* will also increase in most countries (exceptions: Denmark and Greece). Such growth is likely to continue to be concentrated in trade and hotel and catering, but also in banks and the public sector.
- *Fixed-term employment contracts* are also on the increase in the overwhelming majority of the Member States, although in countries such as Spain and Greece the importance of such contracts is expected to decline: currently one-third of employment contracts in Spain are fixed-term, a level that is evidently no longer considered acceptable. In the other countries, attention is drawn to a continuing trend, alongside fixed-term contracts, towards more flexible employment relations and in some cases also towards greater job insecurity.

Unemployment

Over the next 10 to 12 years, the unemployment rate is expected to decline in almost all the Member States (exceptions: Austria with a slight rise and Portugal with, under certain circumstances, a dramatic increase in unemployment). In many cases, though, this decline in the unemployment rate will be only very slow. The unemployment rate in the EU as a whole remains very high.

Expectations are most positive in Belgium, Denmark, Ireland, the Netherlands, Finland and the United Kingdom. In the Netherlands and the United Kingdom, labour shortages are considered possible for highly skilled workers. Yet particularly in the case of the United Kingdom (but also other countries), the spectrum of possible

unemployment trends forecast is wide. Even where the average unemployment rate falls markedly, substantial labour market problems may remain. This is particularly true for the long-term unemployed, the elderly, the low skilled and immigrants. On top of this come more general problems with the various forms of unofficial employment. In the United Kingdom, for example, an increasing polarisation of employment chances is thought probable against the background of falling unemployment.

Implications for policy action

From the labour market trends presented in the national reports, brief conclusions regarding a number of different policy areas, such as *growth policy, immigration policy, regional policy, structural policy* and *fiscal policy,* are drawn for each country.

The topics most frequently mentioned are as follows; obviously, they are in line with some aspects of the four pillars of the European Commission's "Proposal for Guidelines for Member States Employment Policies 1998"[1].

Early retirement

Faced with the growing number of pensioners in almost all countries, the reports describe the first steps being taken to reverse the trend towards declining participation rates among older workers. In the overwhelming majority of the Member States, calls are being made for restrictions on the practice of early exit from the labour force. In some countries, early retirement is to be replaced by partial retirement schemes. The need for policies to promote the employment of elderly workers, up to and including laws against the discrimination of older workers, has been perceived.

Training

Given the fact that the number of persons leaving the labour force is increasing at a faster rate than younger people are entering the labour market, firms are confronted with the problem of knowledge renewal. On top of this comes the rapid shortening of the half-life of acquired knowledge. The central message here is: lifelong learning! This must be underpinned by improvements in initial and further vocational training. In some countries, incentives for improved qualifications are considered necessary.

Female employment

In many cases, the parameters for a further increase in female employment are inadequate. Frequently mentioned in this context are social security systems and a child-care and domestic-service infrastructure. The transitions between phases of paid employment and non-employment should be facilitated.

Unemployment

Last but not least, many of the national reports conclude by underlining the importance of a more active employment and labour market policy. In many countries, even in those in which the average unemployment rate is forecast to fall relatively rapidly, specific measures to reduce long-term and youth unemployment, which remain very high in most cases, and to promote the integration of ethnic minorities and older workers are still considered an urgent priority.

Concluding remarks

One should always remember the old adage: prognoses are uncertain, particularly when they refer to the future! Yet with all due caution, the individual national reports show that, in countries with long experience of forecasting, reasonable and reliable prognoses of labour market trends can be derived. It is therefore not surprising that in those countries with only limited forecasting activities the lack of such a database is a source of complaint. At heart, prognoses constitute the quintessential outcome of a careful analysis of past trends. There can be no doubting their utility as a basis for information and decision-making. At the same time, improvements in the forecasting infrastructure are necessary, both in individual Member States and in coordination between the Member States.

The question remains whether actors in the political sphere are able to draw the necessary conclusions from labour market prognoses and to implement them in practice. The experiences in this regard, even in countries with a good forecasting infrastructure, are not always encouraging.

1 Cf. *Presidency Conclusions*, Extraordinary European council Meeting on Employment, Luxembourg, 20 and 21 November 1997.

Belgium

Medium-/long-term forecasting in Belgium

In Belgium, the most important *medium-term* forecasts come from the Federal Planning Office (for Belgium as a whole) and from the Support Centre Employment-Labour-Training (for Flanders).

In 1997, the Federal Planning Office *(Federaal planbureau)* published the economic forecasts for Belgium in 2001. On the basis of its own calculations, it forecasts the distribution between employees and unemployed and in which sectors employment will in/decrease.

In 1996, the Support Centre Employment–Labour–Training *(Steunpunt Werkgelegenheid–Arbeid–Vorming* – WAV) produced a forecast of the activity rates and the working population in Flanders in 1999 for each age group of five years, and separately for men and women. It also compared the results for each age group with the working population in Flanders in 1994. Three different scenarios were used, which will be explained below.

There are also three important *long-term* forecasts: one developed specifically for Belgium (by the National Institute for Statistics) and two made in a European context (by the Economic and Social Research Group on Population and by the Institute for Mathematical Sciences and Applied Economics).

The National Institute for Statistics (*Nationaal Instituut voor de Statistiek* – NIS) has recently published its population forecasts for 2050, based on the situation in 1995. The prognosis relates to the total Belgian population, disaggregated by gender and age group.

The Economic and Social Research Group on Population (*Groupe de Recherche Economique et Sociale sur la Population* – Gresp) has based its forecasts on the demographic prognosis by Eurostat. Gresp has calculated the general developments of the total population and of the active population for 13 Member States of the European Union to the year 2020.

The Institute for Mathematical Sciences and Applied Economics (*Institut de Sciences Mathématiques et Economiques Appliquées* – ISMEA) attempted in 1996 to forecast labour market trends in the EU and its Member States up to 2015. The institute based its calculations on retrospective and projected time-series data on demography, employment and unemployment.

Description and discussion of major trends

Demography

The total population in Belgium was 10,131,000 on 1 January 1995. In 2020, this will reach a maximum of 10,338,000, according to the NIS. After this period, the population is forecast to decline to 9,983,000 in 2051. This indicates considerable stability in the sense that the extreme values over the whole period remain within a margin of 2%.

According to Gresp, the total Belgian population will develop from 9,947,782 in 1990 to 9,731,332 (the first scenario) or 11,309,907 (the second scenario) in 2020.

The NIS predicts that immigration will decline slightly between 1995 and 2050, from 61,086 to 60,000, while emigration will rise from 50,385 to 57,133. This means that net immigration will decline from 10,701 units to 2,867.

We can therefore conclude that the total population will remain broadly stable until 2020[1].

Age distribution

As far as the population aged between 20 and 64 is concerned, the Gresp prognosis suggests that it will move from 6,002,600 in 1990 to 5,915,000 (the first scenario) or 6,450,000 (the second scenario) in 2020. In most countries of the EU, the working-age population rises in both the first and the second scenario. However, for Belgium, both scenarios agree on the fact that there will be a clear ageing of the potential active population: the ratio between the 20–39 and the 40–64 age groups decreases from 1.05 to 0.75 in 2020.

The NIS predicts that the total population will age between 1995 and 2051: those younger than 40 years decrease from 54% to 44% of the total population, while the oldest generation (80+) increases from 4% to 10%. Table 1 shows further details. The proportion of those aged 60 and older to those aged 20 and younger

1 According to the first scenario, 250,000 migrants will immigrate into the twelve countries of the EU studied. According to the second scenario, immigration will reach 750,000.

Table 1: Total population by age group (in %)

	1995	2051
0–19 years	24.1	20.8
20–39 years	30.0	23.5
40–59 years	24.6	23.9
60–79 years	17.5	22.1
80 years and older	3.8	9.7
Total	100.0 (10,130,574)	100.0 (9,982,860)

Source: NIS.

continues to increase, from 88% to 153%. The ageing within old-age groups (which is determined by the proportion of 80+ to 60+) increases from 18% to 31%. The dependency coefficient (which compares the 60+ and 20– with the potential actives) increases from 83% to 111%. The ageing within the working-age population (which compares the 40–59 with the 20–39 age group) increases from 84% to 112% in 2012, but then declines to 102% in 2051.

As a consequence of the baby boom, the number of people aged 20–24 diminishes from 1995 onwards. According to Gresp, all the Member States of the EU will experience a decline of 20% to 25% in the number of active youngsters among 20–24 year-olds between 1995 and 2000.

Table 2 shows that the three scenarios developed by Steunpunt WAV predict a decline in the young (15–34) and in the old (55–64) active population in Flanders, and a strong increase in the age group between 35 and 54 years old.

Labour supply

As far as the active population is concerned, Gresp predicts on the basis of its two scenarios – and without giving precise figures in its report – that the active population will remain broadly stable over the longer term[2]. However, it nuances this general observation by saying that this forecast depends centrally on a subtantial rise in female participation rates. The active male population will continue to fall.

The *Planburau* predicts that the active population will rise in the medium term (2001) from 4,393,900 to 4,446,300 (= +52,400) units.

For Flanders, we base our analysis on the three scenarios developed by Steunpunt WAV. These three scenarios are as follows:

1. The activity rates between 1994 and 1999 develop in the same way as they did between 1989 and 1994 (on the basis of data provided by the NIS). The population data are provided by CBGS[3].
2. The activity rates between 1994 and 1999 remain stable (on the basis of data provided by NIS). The population data are provided by the NIS.
3. A linear projection for Flanders of the analysis made by the *Planbureau* (for Belgium). In this model, different elements are taken into account, such as the development of the working population in the past, the changing age structure and legal changes (such as the increase of the minimum age for early retirement).

In the three scenarios, the total active population in Flanders rises between 1994 and 1999 by 115,000 (in the first scenario), by 13,000 (second scenario) and by 28,000 (third scenario).

On the basis of the different projections mentioned above, we can conclude that in the medium term the active population will increase by 52,000 units. In the long term, the active population in Belgium will remain more or less stable. This conclusion can also be drawn from the prognosis made by ISMEA (see Figure 1), who also predict that the active population will increase by 52,000.

Table 2: Change in the active population between 1994 and 1999, by age group, in Flanders (absolute figures)

Age group (years)	Scenario 1	Scenario 2	Scenario 3
15–19	–1,780	+475	
20–24	–26,392	–24,520	–41,500
25–29	–38,742	–44,797	
30–34	–3,838	–17,165	
35–39	+41,176	+22,901	–51,900
40–44	+55,639	+30,326	
45–49	+37,191	+16,738	
50–54	+53,502	+36,418	+119,500
55–59	–1,441	–6,019	
60–64	+39	–869	+1,900
Total	+115,354	+13,488	+27,900

Source: Steunpunt WAV.

Gender distribution

According to the NIS, the proportion of men and women in the total population will remain stable between 1995 and 2051: 48.9% men and 51.1% women.

According to the projections made by ISMEA, females will constitute a majority in the labour market within 20 years. The activity rate of men will decline from 65% in 1997 to 60% in 2015, whereas the activity rate of women will rise from 48% to 65%. This is illustrated in Figure 1.

The gender distribution derived by *Steunpunt WAV* for Flanders is shown in Table 3. The three scenarios predict a relatively small increase in the male active population. As far as women are concerned, no clear picture emerges. The number given in the first scenario is certainly exaggerated, because it is based on the strong increase of female activity rates in the period from 1989 to 1994. In the second scenario, there is a slight reduction of the female active population, while the two other scenarios show a clear increase.

We can thus conclude that in the long term the activity rate of men will decline, while the activity rate of women will rise significantly.

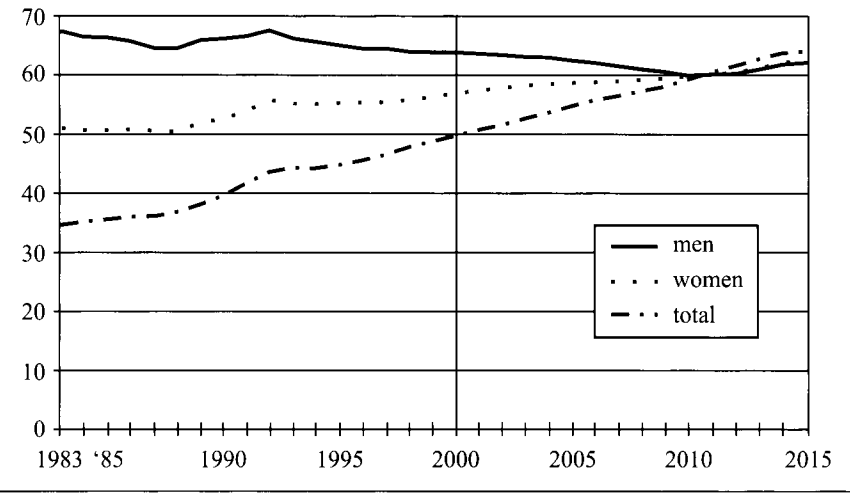
Labour demand and employment/unemployment

The *Planbureau* forecasts on the basis of its own calculations that employment will rise from 3,707,200 persons in 1997 to 3,800,000 in 2001, i.e. an increase of 92,800 persons. As the active population is forecast to increase over the same period

2 In most countries of the EU, the active population will rise. The only exceptions are Germany, Italy and Belgium.

3 The Centre for Population and Family Studies (*Centrum voor Bevolkings- en Gezinsstudies* – CBGS) has produced a forecast of the development of the Belgian population between 1995 and 2010.

Figure 1: Activity rates according to gender



Source: ISMEA.

by 52,400 units, unemployment will fall from 639,800 to 599,400, a decrease of 40,400.

While the demographic projections of the active population made by ISMEA are considered very reliable, the unemployment forecast relies on prognoses of both the activity rate and employment. As far as the latter is concerned, the basic scenario of DGII has been chosen, which predicts employment growth of 0.7% for all the countries of the EU taken together. This employment growth of 0.7% is assumed for Belgium. The main purpose in the analysis of ISMEA consists in bringing forward indicative tendencies in the future. It is in the light of this that the projections for a negative unemployment rate – which would happen in approximatively 50% of the 150 European regions in 2015 – have to be understood. These negative unemployment rates are not to be interpreted as absolute numbers; they merely show the relative importance of the changes in comparison with the (postive) rates of other years. As is shown in Figure 2, the unemployment rate in Belgium will decline (from 10% in 1996 to –7% in 2015).

Both in the medium-term and in the long-term projections, a decrease is expected in Belgian unemployment. According to the *Planbureau*, the number entitled to full employment benefit until 2001 will decrease by 72,500. The number of elderly unemployed will increase by 25,600, due to (1) the facilitation of entry into a system especially created for elderly unemployed (aged 50 and more) who do not want to reenter the labour market and (2) the pension reform, which involves an increase in the retirement age.

Basic sectoral developments

According to the *Planbureau*, employment will decrease in industry up to 2001, whereas it will increase in the service sector. This increase is due to several factors, including:

- the recovery of economic activity;
- the frequency of part-time work in the service sector;
- the reduction of employer social insurance contributions in services;
- the creation of supplementary jobs.

This development is shown in Table 4 (p. 10).

Skills/occupational distribution

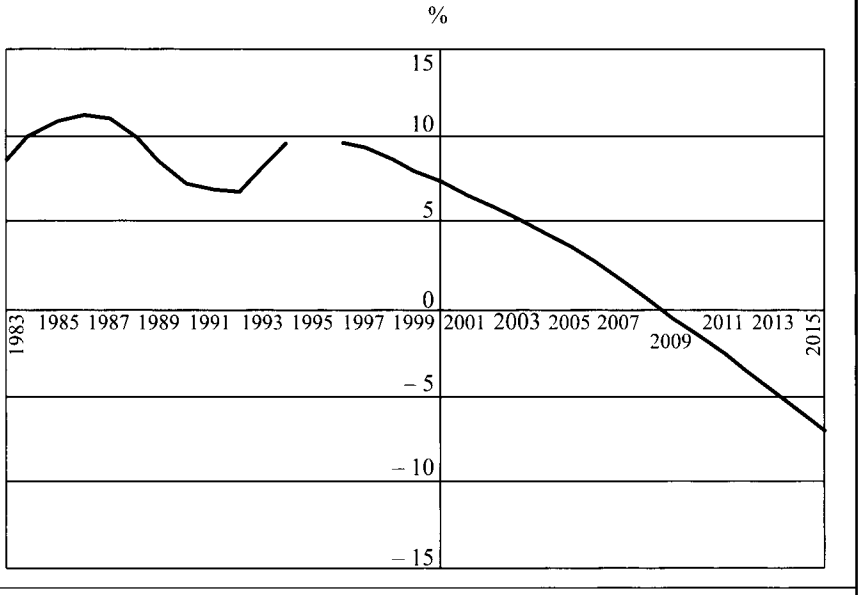
No forecasts of occupational distribution were found. However, we do have information on vacancies and

Table 3: Difference in the active population between 1994 and 1999, by gender, in Flanders (absolute figures)

	Scenario 1	Scenario 2	Scenario 3
Men	+3,393	+14,844	+9,900
Women	+111,961	–1,356	+18,100
Total	+115,354	+13,488	+27,900

Source: Steunpunt WAV.

Figure 2: Unemployment rates from 1983 to 2015



Source: ISMEA.

key occupational groups for the years 1990–95 (see Table 5). On the basis of these data, we can predict further growth in white-collar jobs and a decline in manual labour functions in the near future (which can be explained partly by the decrease in industry).

Contractual arrangements

According to Gresp, the traditional type of contractual arrangements (full-time permanent contracts) will become increasingly rare in Belgium. The incidences of part-time work and irregular working hours, by contrast, will expand.

When we look at the development of part-time work in the last ten years (see Table 6), we see that the proportion of male workers working part-time has risen (from 1.8% to 2.8%). The proportion of female part-time workers has grown in the same period from 23.2% to 29.8%. We can forecast on the basis of these data that part-time work will continue to gain in importance in the future.

With respect to the changes in fixed-term contracts, it can be observed that the percentage of these contracts increased from 5% in 1988 to just 5.1% in 1994 (Delsen 1997). This suggests that the number of fixed-term contracts may grow slightly in the future, but not as much as is sometimes supposed.

Conclusion

The increase in the dependency coefficient and the ageing of the potential active population indicate that special attention should be paid to the situation of older workers. The government can take several steps to retain them in the labour market for longer, such as:

- organise information campaigns in order to combat age stereotypes in the labour market;
- prohibit age criteria in recruitment;
- make the temporary employment agencies, the outplacement bureaus and the services for unemployment and professional training more accessible to older workers;
- give subsidies to older workers who stay in the labour market and whose situation is threatened;
- reduce the use of the "bridging pension", which enables older workers to leave the labour market for good and to receive financially attractive allowances.

Regarding the growth of the service industry (with its above-average proportion of women workers) and the increase of the female active population, more measures should be taken to facilitate the reconciliation of family responsibilities and working life. The easiest way to achieve this lies in the expansion of the so-called "career break", which enables workers to leave the labour market for a limited period and to receive an allowance. This would facilitate the recruitment of women who, in most cases, are responsible for caring for young children.

The resources saved by abolishing the "bridging pension" (cost = BEF 400,000/person), would make it possible to expand the "career break programmes" (cost = BEF 100,000/person) and to follow a policy which is oriented more towards active labour market measures, such as training: as the inflow of youngsters (20–24) into the labour market will be reduced, special attention should be paid to the integration of new technologies for all of the working population. If more money were allocated for the training of older workers, this would also strengthen their labour market position in the future.

Until recently, the weakest position on the labour market was occupied by low-skilled female workers. It is possible that this will change in the future. Although the long-term forecasts predict a net decrease in unemployment rates, it can be imagined that some low-skilled *male* workers will encounter certain problems in finding a (new) job in the coming years. This is due to three factors: the increase in skill requirements, the decline of industrial employment (and thus of typical male jobs) and the emphasis that the government is putting nowadays on the creation of new jobs

Table 4: Employment by sector, 1996 and 2001 (in thousands)

	1996	2001	Evolution
Enterprises	*3,065*	*3,174*	*+109*
– Agriculture	94	91	–3
– Industry	709	686	–23
– Building and construction	237	247	+10
– Services	2,026	2,150	+124
Public sector	*627*	*626*	*–1*
Total employment	3,693	3,800	+107

Source: Planbureau.

Table 5: Vacancies and key occupational groups (in %)

	1990	1991	1992	1993	1994	1995
Specialised	16.3	17.3	16.7	17.7	16.7	18.0
Administrative	12.3	10.9	11.0	11.1	10.7	11.3
Commercial	6.1	6.4	6.5	7.0	8.6	9.9
Servicing	16.5	17.3	16.6	15.7	16.1	16.1
Manual labour	48.8	48.2	49.2	48.5	47.9	44.5

Source: Denys (1997).

Table 6: Proportion of employees working part time (in %)

	1985	1990	1995
Men	1.8	2.2	2.8
Women	23.2	29.3	29.8
Total	9.3	12.6	13.6

Source: Eurostat, Labour Force Survey.

in domestic services (which are largely performed by female workers).

Jan Denys & Peter Simoens

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DK Denmark

Labour market forecasting in Denmark

Labour market forecasts in Denmark are produced by several institutions using different methods and models. This section gives an overview of the main types of forecast.

Macroeconometric models

Denmark has a long tradition of quantitative macroeconomic forecasting dating back to the construction of two large-scale macroeconometric models in the early 1970s. The *Annual Danish Aggregate Model* (ADAM) was developed and is maintained by Statistics Denmark; it is used by a number of government agencies and also by private organisations and firms (e.g. banks). The *Simulation Model of the Economic Council* (SMEC) is used by the influential chairmen of the independent, semi-official Economic Council to produce their biannual forecasts. The National Bank of Denmark also runs a macroeconometric model.

Disaggregated models

In recent years, the traditional macroeconometric approach has been supplemented by disaggregated models. One line of work has been to combine the macroforecasts of labour demand from ADAM or SMEC with input-output models giving a detailed distribution of labour demand by sector and educational background. Combined with forecasts of the labour force disaggregated by educational level, such exercises provide forecasts of possible mismatches on different segments of the labour market. An example of such a forecast from the Institute of Local Government Studies is presented in the following section.

Another disaggegated model developed by the Department of Labour (RIMO) is used to forecast labour market developments at the regional level. The RIMO model is basically an accounting framework with limited theoretical content.

A further dissaggregated approach has followed the international trend towards disaggregated empirical models based on neoclassical microeconomic theory (empirical general equilibrium models). Such models are being developed by the Ministry of Business and also by various research institutions. They are, however, still at the experimental stage.

Scenarios

A third approach has been to use scenario techniques to "paint a picture" of future labour markets. Typically, such scenarios not only focus on the labour market, but also look at broader economic, social and political developments. In some cases, this technique has been applied to labour market and industrial development at the sectoral or regional level (e.g. Pilegaard Jensen et al. 1997). The concept of scenarios is sometimes combined with more quantitative approaches to labour market forecasting, as for instance in the long-term forecasts of the Ministry of Finance discussed below.

Surveys

This methodology is applied in several ways. Firstly, in order to generate short-term (one-year) forecasts of labour market development at the regional level, the regional labour market boards collect information from local firms in a more or less formal manner. Such forecasts are now produced every quarter.

The Department of Labour is presently refining this forecasting system in order to include panels of firms in a more systematic fashion and to combine the results derived from surveys with those from other techniques (e.g. structural analysis and scenarios).

Apart from this more systematic use of surveys, a number of examples

can be found of future-oriented research projects which collect information from employers, employees, labour market organisations or independent experts in order to detect important qualitative long-term trends on the labour market.

Important trends on the Danish labour market

What then are the most important trends on the Danish labour market, as viewed by the numerous forecasters? This section gives an overview based on recent reports.

The medium term

One of the outputs of the macroeconometric simulations is, of course, forecasts of labour market developments. A recent example of a medium-term forecast based on ADAM from the Ministry of Finance is found in Figure 1. It covers the period until 2005.

The forecast is for a positive development on the Danish labour market in the medium term. The labour force is expected to increase from 2,805,000 persons in 1997 to 2,950,000 persons in 2005. Total employment will increase to an even greater extent, from 2,570,000 persons in 1997 to 2,785,000 persons in 2005. Most of this increase is expected to be in the private sector, with public employment growing by just 64,000 persons. As a result, registered unemployment (the difference between total employment and the labour force) is expected to fall from 235,000 in 1997 to 165,000 in 2005 (or from 8.4% to 5.6% of the labour force). This forecast of course rests on a number of critical assumptions concerning the underlying factors behind the supply and demand for labour. This will be discussed in greater detail in the following section.

Both ADAM and SMEC are based on the Tinbergen tradition in macroeconometric modelling. Thus, they are founded in Keynesian macroeconomic theory, where changes in demand determine production and employment in the short run. In the medium and long term, the behaviour of the models is influenced by feedbacks from the labour market, where the level of unemployment determines wage growth and leads to changes in international competitiveness. Also, the dynamics of investment and productivity growth influence the long-term properties of the models.

The labour force and employment by age and gender

The forecasts of Danish population and labour force trends have changed dramatically in recent years. Only a few years ago, both were forecast to diminish from the late 1990s and into the first decades of the next century. In the most recent forecasts, however, the total population is expected to rise from 5.2 million in 1996 to 5.5 million in 2025. The main reasons for this change are an expected increase in fertility and growing immigration; these expectations are based on new evidence from the early 1990s.

Consequently, the labour force will grow until 2005 and then remain almost constant. At the same time, the age composition of the labour force will change. The number of older persons (over 50 years) will increase by 40%, while the middle-aged will decline as a share of the total population. During the forecasting period, the difference between the activity rates of men and women is expected to narrow even further from the present gap of 7 percentage points to 3 percentage points.

The growth in the labour force will also be influenced by the number of persons in early retirement programmes and leave schemes. Such programmes have been very popular in recent years. As a result, the work force is expected to fall as a share of total population from 55% today to approximately 53% in 2025, thus increasing somewhat the economic burden on the active population. If the popularity of early retirement schemes remains unchanged compared to the present situation, this burden may increase even further.

Sectoral developments in the medium term

The medium-term forecasts for sectoral employment follow the well-known historical patterns (cf. Table 1). Private and public services will continue to be the driving forces in job creation due to the high income elasticity of services and the presumably lower productivity growth in services compared to other sectors. As shown below, the long-term secto-

Figure 1: Forecast to 2005 by the Danish Ministry of Finance (December 1996)

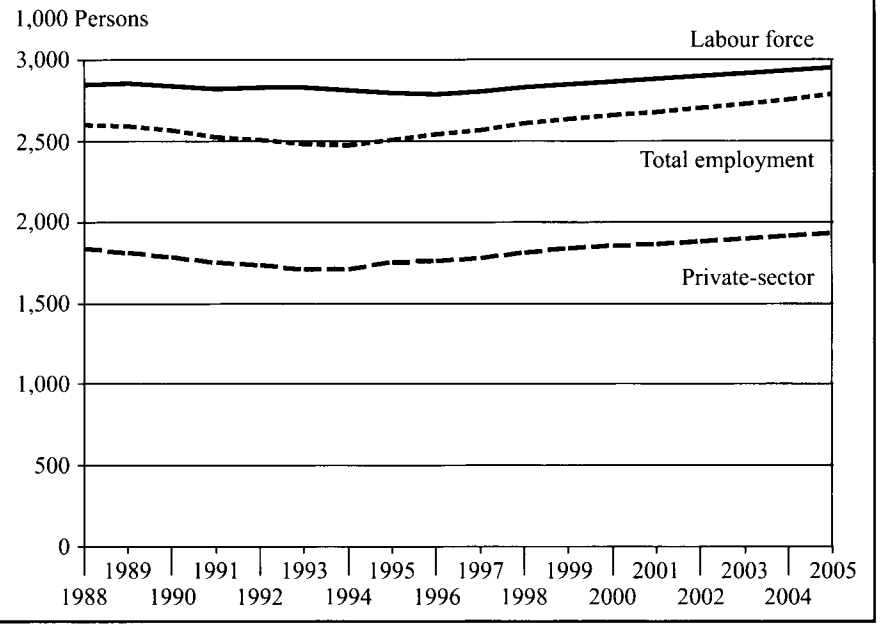


Table 1: Forecast of sectoral distribution of employment, 1995–2005

	1995		2005		Change 1995 to 2005 (%)
	1,000 persons	Share (percentage)	1,000 persons	Share (percentage)	
Agriculture	116	5	109	4	–6
Manufacturing	512	20	532	19	3
Construction	169	7	197	7	17
Private services	939	37	1,083	39	15
Public sector	765	30	853	31	12
Miscellaneous	11	0	11	0	0
Total employment	2,512	100	2,785	100	11

Source: Author's calculations based on Ministry of Finance (1996), Table 9.9.

ral demand for labour will depend very much on the overall pattern of economic growth.

The demand for skills

The question of the demand for different skills can be discussed at two levels. First, one may point to the general consequences for employment of technological change and new kinds of management and work organisation. One such effect is the ongoing shift in the structure of labour demand, generating risks of mismatch problems and – probably – a trend towards reduced demand for low-skilled labour. Furthermore, the kind of qualifications demanded are moving away from job-specific and narrow formal skills towards broader, informal and personal qualifications like flexibility, language knowledge, ability to cooperate, etc. These changes are seen as general and fundamental tendencies which – though difficult to quantify – are relevant for all sectors of the economy and also closely related to the basic nature of the new information technologies (cf. Csonka 1997).

At a second and more specific level, the forecasters attempt to identify the differences in labour demand that result from different growth patterns of the economy. These forecasts are focused more on formal educational qualifications. Table 2 presents an example of such a forecasting exercise based on a combination of macroeconomic forecasts and a disaggregate model describing the demand for and supply of persons with different educational backgrounds.

Two points can be made from Table 2. Firstly, while the base scenario assumes only a slight increase in overall unemployment, the relation between the unemployment rates of the different groups will change, reflecting the trend towards an increase in the generel level of skills demanded. Therefore, the unskilled are expected to face a worsening unemployment situation over the next 15 years.

Secondly, both general unemployment and unemployment among the individual groups will in the long run depend on the structural changes in the economy. In the service scenario, the public service sector is expected to grow much more rapidly than in the base scenario. This lowers average unemployment to about 3%, but only halves the unemployment of the unskilled. On the other hand, severe shortages of employees with further education arise due to the increased need for doctors, teachers, nurses, etc. Thus, not only the general level of unemployment, but also the mix and level of skills demanded depend heavily on the assumptions about the future composition of demand for goods and services.

Trends in working time and working conditions

Both the standard working hours set by collective agreements and actual working hours have fallen steadily over the last decades (cf. Figure 2).

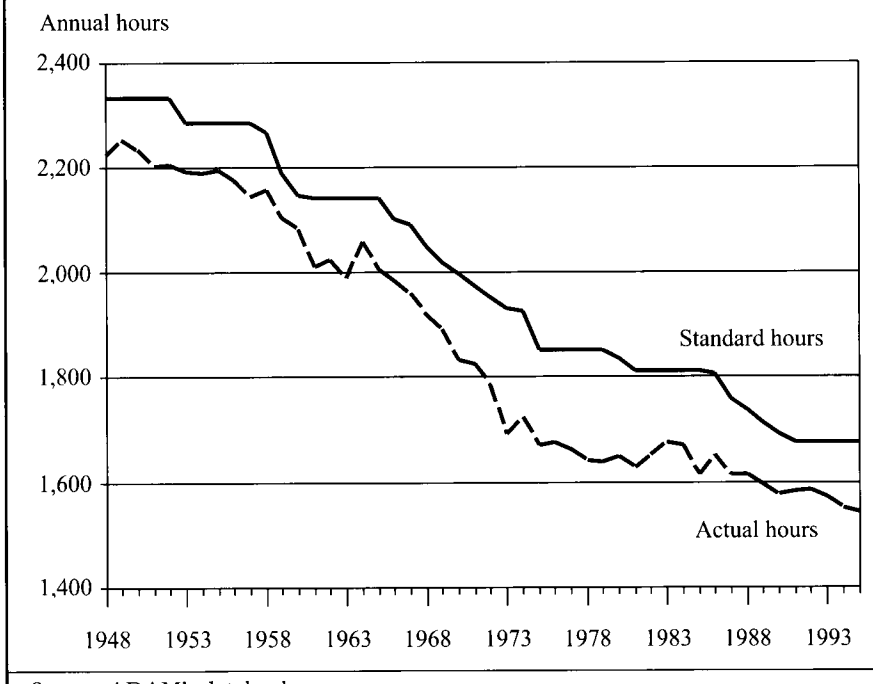
Since the beginning of the 1970s, the fall in actual hours has levelled out somewhat and is now declining at an average annual rate of about 0.5%. The share of part-time workers in 1995 was 26% overall and 10% for women and men respectively. For men, the incidence of part-time work has increased slightly during the last decade, while the share for women has fallen from 36% in 1984 to its present level of 10%. In 1995, 7% of female and 20% of male workers worked more than 40 hours per week. Most forecasters expect average annual hours to continue their gradual fall over the coming years. At the same time, more flexible working arrangements like tele-working are expected to become more wide-

Table 2: Unemployment rates by educational level (percentage) for two different scenarios, 1996 and 2010

Educational level	1996	2010	
		Base scenario	Service scenario
Unskilled	12.9	18.0	6.7
Skilled	7.9	10.6	2.1
Further education (short)	4.8	5.9	–1.1
Further education (medium)	3.1	2.6	–2.6
Further education (long)	4.3	3.9	–1.4
Total	8.2	10.8	2.9

Source: Groes et al. (1996), Table 6.1 and 6.2.

Figure 2: Standard annual hours and actual average working hours in manufacturing industry, 1948–1995



Source: ADAM's databank.

spread. Finally, the total supply of working hours will be heavily influenced by the popularity of the various early retirement and leave schemes which have been introduced in recent years.

A forecast to the year 2030

Many of the points discussed above may be summarised by presenting the latest long-term forecast published by the Ministry of Finance (cf. Table 3). Here, three macroeconomic scenarios to the year 2030 are simulated.

- a *leisure scenario* with a gradual fall in annual working hours and a lower retirement age; also structural unemployment is assumed to stay at a high level of approximately 9.5%;
- a *service scenario* with constant working hours and a lowering of both structural unemployment and the number of persons on transfer income; the resulting increase in productive capacity is allocated to an increase in the public service sector and investment in infrastructure;
- a *tax-relief scenario* based on the same assumptions as the service scenario except that the increase in production is due to private consumption through a lowering of income taxes.

Comparing the employment levels and the distribution of employment by sector again underscores the sensitivity of employment forecasts to the assumptions made concerning the overall structure of the economy. In the leisure scenario, total employment will fall drastically, while the two other scenarios show stable total employment, although with clear differences in the sectoral distribution (and required skill mix). Also the latter two scenarios are based on the assumption of a gradual decline in structural unemployment to a level of around 5%. If this reduction is not accomplished, the employment levels assumed in these scenarios will become unrealistic due to the high risk of inflationary wage pressure.

Policy considerations

The forecasts discussed in the previous sections are, of course, related to an ongoing debate concerning the need for policy action caused by the different prospects for the Danish economy and labour market. In this context, the line of causation often goes both ways in the sense that forecasts are in many cases put on the agenda with the implicit aim of promoting specific political strategies.

In the current Danish debate, some focal political issues connected with the forecast trends on the labour market are:

- The question of whether it will be *possible to reduce structural unem-*

Table 3: GDP per capita and employment in three scenarios for the Danish economy until 2030

	GDP per capita	Employment	Private service	Public sector	Other sectors
	1,000 1995 DKK	1,000 persons	Share of total employment (percentage)		
1995	160	2,509	37.4	30.5	32.1
Leisure scenario					
2005	179	2,569	37.7	31.5	30.8
2020	198	2,428	38.2	36.0	25.8
2030	215	2,375	38.6	38.3	23.1
Tax-relief scenario					
2005	202	2,808	38.6	30.1	31.3
2020	258	2,833	41.3	31.0	27.7
2030	294	2,799	42.3	32.5	25.2
Service scenario					
2005	202	2,829	37.5	31.9	30.6
2020	253	2,836	39.3	34.6	26.1
2030	287	2,792	40.3	35.8	23.9

Source: Ministry of Finance (1996), Tables 2.4.2 and 2.4.4.

ployment to the extent that a much lower level of unemployment – as is assumed in some forecasts – will be feasible from a macroeconomic point of view. This discussion is of course closely tied to the debate on active labour market policy and social policy. Will it be possible to reduce marginalisation and long-term unemployment from the high level of the 1980s and 1990s? Furthermore, the level of unemployment will depend on the competitive position of Danish workers vis-à-vis the emerging new market economies in Eastern Europe.

- The *pension debate*, which is related to the growing economic burden placed on the economically active part of the population by the increase in the number of persons outside the labour force. This rise is caused not only by demographic factors but also by the popularity of the early retirement and leave programmes and by the rising number of adults receiving other forms of transfer income (including social pensions).
- The need to stimulate *lifelong learning* and education in a situation where the age composition of the work force will imply a growing share of older and middle-aged workers.
- The risk of *mismatch problems* caused by shortages of qualified labour. Several observers have pointed to the lack of incentives to undertake further education caused by the combination of a limited wage dispersion and high marginal income taxes. This problem is exacerbated by the fact stressed above that the composition of the demand for labour is strongly dependent on the actual growth pattern of the economy and therefore also on the political choices made between growth in the private and the public sector.

The final fundamental point which should be made concerning the Danish forecasts is thus that there is a growing awareness of the fact that forecasts which go beyond the short term should be seen more as possible scenarios for the future of the Danish economy. Such scenarios should then act as inputs into the political debate on how one should try to influence the actual shape of the economy and labour market in the future. Here, the latest forecasts from the Ministry of Finance are clearly intended to act as inputs into the political debate on the future of the Danish model of the welfare state.

Per Kongshøj Madsen

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Germany

Labour market prognoses in Germany

For many years now employment and unemployment trends have been forecast in Germany in the form of short-, medium- and longer-term prognoses. Among the short-term prognoses, the annual macroeconomic forecasts by the Council of Economic Experts *(Sachverständigenrat)* and the twice-yearly prognoses by the six leading German economic research institutes are the best known and the most influential. These consist primarily of analyses and prognoses of economic developments, but they also include quantitative prognoses of employment and unemployment with a time horizon of one to two years. The IAB *(Institut für Arbeitsmarkt- und Berufsforschung)* supplements the short-term business cycle prognoses with annual labour market forecasts that consider demand and supply trends on the labour market in detail.

Medium-term prognoses with a time horizon of five years are published relatively seldom in Germany. Apart from medium-term prognoses produced by individual research institutes on request, the most important source are the official government projections of macroeconomic developments in Germany (cf. Bundesministerium für Wirtschaft 1997). These, too, are forecasts of economic developments that contain information on employment and unemployment in west and east Germany.

A large number of *long-term prognoses* with a time horizon of ten years

and more have been made for Germany. These cover both demographic developments and labour supply and employment/unemployment[1].

Among the *demographic prognoses*, the central role is played by those calculated by the Federal Statistics Office (coordinated between various governmental institutions), as they form the basis for many official calculations and decisions. The most recent coordinated demographic prognosis published, the eighth, contains three different variants that differ primarily with respect to the extent of immigration (Sommer 1994). The prognoses contain data to the year 2040, differentiated by age and gender, and split between west and east Germany. Besides this, longer-term demographic prognoses are published by a number of other institutions:

- Bundesforschungsamt für Landeskunde und Raumordnung (Buchner et al. 1994);
- Deutsches Institut fur Wirtschaftsforschung (DIW), Berlin (Schulz 1995);
- Institut der deutschen Wirtschaft (Hof 1994);
- Institut für Bevölkerungsforschung und Sozialpolitik (Birg & Flöthmann 1993);
- Prognos AG (Prognos 1993, 1996).

The supply of labour is also the subject of forecasts. The most important *labour supply prognoses* include those by:

- Deutsches Institut für Wirtschaftsforschung (DIW), Berlin (Gornig et al. 1997);
- Institut fur Arbeitsmarkt und Berufsforschung (IAB) (Thon 1991);
- Institut der deutschen Wirtschaft (Hof 1994).

These forecasts are usually closely linked to the demographic forecasts published by the institution in question and have a time horizon up to the year 2010 or longer. They are differentiated by age and gender and most also distinguish between east and west Germany. The forecasts of the IAB also cover potential labour supply, which includes, in addition to those in employment and registered unemployment, those people who would be interested in taking up employment under more favourable economic conditions (hidden unemployment).

Of the specific *employment and labour market prognoses*, the long-term forecasts by the IAB play a central role (Klauder 1990). The estimates for west Germany are based on an econometric model (SYSIFO); for east Germany, a simpler quota model is used. In addition, the IAB has published the results of structural forecasts on activity-specific and qualification-specific labour demand to the year 2010 (Tessaring 1994), developed in cooperation with Prognos (Prognos 1989). Occupation-specific prognoses, on the other hand, are not available in Germany.

The most important trends

Medium-term developments

In its medium-term forecasts, the federal government assumes that the cyclical recovery will strengthen from 1998 (Bundesministerium für Wirtschaft 1997). It posits average real GDP growth of 2.5% per annum and employment growth of 0.25% per annum between 1997 and 2001. This is based on the transmission mechanism: exports, investment, employment and rising private consumption. It is assumed that GDP growth will average between 1.5% and 2% in west Germany, whereas the prognosis for east Germany is based on annual growth of 3%. This leads to a rise in employment of almost 300,000 by the year 2001. A fundamental change in the labour market situation, not to mention a halving of unemployment, cannot be expected on the basis of this forecast.

Long-term demographic trends

All the recent demographic prognoses expect a further increase in the residential population of Germany to the turn of the millennium. The forecasts for the year 2000 range between 81.7 million (Birg & Flöthmann 1993) and 84.1 million (Buchner et al. 1993), compared with an initial level of 81.3 million in 1993. In the following period (to the year 2010) a turnaround in the population trend is expected by the majority of forecasts, marking the start of a continual decline in population. To the year 2040, a fall to between 68 and 77 million is forecast by the eighth coordinated population prognosis by the Federal Statistics Office (Sommer 1994). Some other prognoses expect an even sharper decline. Up to the year 2010, the population trend is determined largely by substantial immigration: over the period 1996 to 2010 net immigration of between 3.2 and 5.9 million is expected. In the subsequent period (to the year 2040), on the other hand, it is the rising number of deaths against the background of consistently low birth rates that dominates developments. The differences between east and west Germany regarding birth rates and life expectancy are assumed to disappear.

Labour supply

According to calculations by the DIW, the supply of labour will rise to the year 2010 by almost one million to 41.4 million (Gornig et al. 1997). This is largely owing to rising participation rates among women in west Germany, whereas for east Germany a decline in the until now very high participation rates is expected. Similar projections were made by the IAB in its 1991 prognosis (Thon 1991). In the period to the year 2010, the ageing of the population will affect the supply of labour. Whereas the economically active population below the age of 40 will decline by 4.7 million, the figure for those over 40 will rise by 5.6 million.

Employment and unemployment

In its most recent long-term prognosis, the DIW compared economic de-

1 The following is restricted to those prognoses which, as independent publications, provide a comprehensive description of the prognosis results. Excluded, on the other hand, are all those prognoses developed for specific purposes (e.g. transport and construction forecasts, pension prognoses), although some of them include forecasts of the labour market.

velopments in two economic-policy scenarios (Gornig et al. 1997). In the "integration scenario", which is based on favourable and stable global economic development and assumes a high degree of adjustment flexibility on the part of the German economy, a favourable impact on employment, which grows by around three million to the year 2010, is expected (Table 1). Labour supply will also increase, though, and to a certain extent jobs will be taken by those currently in hidden unemployment. In the "restriction scenario", which is based on less favourable global economic conditions and takes a more pessimistic view of German competitiveness, unemployment will remain at its current level of around 4 million for the foreseeable future. The slight increase in employment of around one million will be offset by the growth of labour supply. In its most recent long-term prognosis for Germany as a whole, the IAB predicts employment growth of between 3.3 and 3.7 million to year 2010 (Klauder 1995). According to its calculations, this would have a positive impact on unemployment of a similar order of magnitude.

Skill structure

In the most recent structural projection for west Germany presented by the IAB and Prognos in 1994, it is again underlined that the service orientation will increase and that from this jobs will demand higher qualifications from the labour force (Tessaring 1994). For the year 2010 it is expected that three-quarters of the labour force will be required to have initial or further vocational training and a further 17% to 18% a university or polytechnic degree. Jobs not requiring completion of formal training are likely to decline to around 10% of the total. In contrast to the most recent actual trends, this projection assumes rising demand for workers with initial practical or practical-technical training. The spectrum of functional activities will shift from production-oriented activities and primary services (such as trade, sales and office activities) to secondary services (such as management, organisation, consultancy and information).

Conclusions

The high and persistent level of unemployment is one of the longest and best forecast social problems in Germany. As far back as the first half of the 1970s, the IAB published data implying that unemployment would soon rise. Despite the many unexpected developments, such as the creation of the European Single Market or German unification, these prognoses have been broadly confirmed by real developments. Yet prognoses have had little impact on economic policy decisions and have failed to stimulate a sustained fight against unemployment. In view of this, more recent employment prognoses do not limit themselves to predicting the continuation of labour market disequilibrium in the future, but rather attempt, by means of policy simulations, to elaborate proposals for an effective employment policy. The IAB has proposed a bundle of measures involving moderate wage growth, cuts in social insurance contributions, working-time reduction and fiscal consolidation, calculating that this could increase employment in Ger-

Table 1: Long-term employment and labour market forecasts according to DIW scenarios (in thousands)

	1991	1994	2010	
			Integration scenario	Restriction scenario
Domestic employment	36,511	34,959	37,925	36,025
Cross-border commuters	–53	4	155	125
German nationals in employment	26,564	34,955	37,770	35,900
Potential labour supply	41,081	41,824	42,794	43,036
Excess supply	4,517	6,869	5,024	7,136
registered unemployment	2,602	3,697	2,758	3,867
hidden unemployment	1,915	3,172	2,266	3,269
Memo items:				
Unemployment rate in %	6.6	9.6	6.8	9.7
West Germany	5.5	8.3	6.2	9.0
East Germany	10.7	14.8	9.1	12.8
Real GDP growth in % p.a.[1, 3]	–	1.3	2.3	1.5
West Germany	–	0.8	1.9	1.3
East Germany	–	7.5	5.5	3.7
Productivity rate in % p.a.[2, 3]	–	2.8	1.8	1.3
West Germany	–	1.4	1.4	1.0
East Germany	–	13.3	4.8	3.8

1 At west/east German prices respectively.
2 GDP per gainfully employed.
3 Annual average changes.

Source: DIW (1997).

many as a whole by 2.5 million to the year 2005 (Klauder et al. 1996). The ifo Institute considers that a sustained reduction in public spending as a share of output is a necessary condition if the employment situation is to improve. In its view, a cut in public spending by DM 50 to 60 billion is necessary in order to reduce the unemployment rate to 5% within five years. The so-called Berlin Memorandum, on the other hand, expects lasting employment effects in particular from further cuts in working time (Bartsch 1997).

Although they accurately described the problem, prognoses, particularly long-term prognoses, are to a large extent determined by past trends, and therefore have difficulty in coping with structural discontinuities. To the extent that can be determined at the present juncture, analyses of the accuracy of growth and employment prognoses show that even after unification Germany's growth potential was frequently exaggerated and the growth of labour supply underestimated (Ratzenberger, forthcoming). Thus long-term prognoses consistently prove incorrect when economic parameters change markedly, such as inevitably occurs over longer periods. Such changes must be expected in future given the expansion of the European Union and ongoing globalisation. Consequently, most long-term prognosis are subject to the restrictive conditions of a number of status quo assumptions. On the other hand, this in no way restricts the central and continually repeated message of labour market prognoses regarding the necessity of orientating economic, labour market and incomes policy towards employment needs.

Kurt Vogler-Ludwig

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Greece

Introduction

All the existing forecasts about labour market indicators are at a high level of aggregation. The Greek economy and labour market face the prospect of undergoing significant changes in the near future due to pressures from international competition, rapid technological advances and restructuring policies. Moreover, significant effects are possible from unforeseen political and economic developments in neighbouring countries. Therefore, the margins of error in making medium- and long-term forecasts about labour market trends are very wide. This may be the reason why official organisations in Greece have refrained from making such forecasts at a level of disaggregation that could allow well-founded inferences about future developments in particular sectors, regions, occupations and skills.

Projections and forecasts

In the Greek Convergence Plan 1994–1999, the expected annual rates of growth of population and of the labour force from 1994 to 1999 are 0.5% and 0.6% respectively. Employment is anticipated to grow by a constantly increasing rate, thus reducing unemployment to 7.9% in 1999.

On the basis of more recent forecasts (Ministry of National Economy 1997), the rates of growth of population and labour force are anticipated to be 0.5% and 1.3% respectively in both 1997 and 1998. The labour force participation rate will continue its slow upward trend, increasing from 63.5% in 1996 to 64.6% in 1998. Employment will grow by 1.5% in 1997 and 1.7% in 1998. As a result, unemployment will decrease from 10.4% in 1996 to 9.7% in 1998.

The Centre of Planning and Economic Research (KEPE) has published aggregate forecasts of the growth rates of output and employment and of the level of unemployment for the period up to 2003 (Table 1). The forecast was based on an assumed average annual growth rate of the labour force of 1.3%. Somewhat more disaggregated forecasts are presented in a KEPE study (KEPE 1996a) but they only go up to 1998 or 1999. According to these forecasts, the labour force will grow by 2.5% in 1994–99. The increase is expected to be distributed unevenly among different regions, with some of them experiencing significant labour force losses. Unemployment is anticipated to remain relatively high due to strong foreign competition, restructuring, restrictive macroeconomic policies and further reductions in agricultural employment.

Detailed projections of expected changes in the supply of labour and employment in different regions and occupations are presented in a KEPE discussion paper (KEPE 1996b), containing estimates of anticipated exit and entry to the labour force during the period 1991–2000. However, these projections were based on the assumptions of zero net migration, no changes in labour force participation rates and constant occupational structures and regional shares. These assumptions limit the usefulness of the results.

According to another study (Labour Institute of GSEE 1996), employment will increase between 1994 and 2000, but unemployment will keep rising since net job creation will be lower than net additions to the labour force. This study also includes sectoral forecasts, but their results have been questioned on account of a serious problem with the data used.

Major trends

Because of the absence of systematic econometric analyses and well-founded disaggregated forecasts, the discussion of trends will be based on general observations from an examination of relevant data and on information from various reports and studies. On the basis of such evidence, the following trends can be identified.

Changing age distribution of the labour force

In recent years, there has been a continuous fall of the natural population growth rate and a considerable increase in immigration[1]. Drastically falling birth rates led to an ageing of the population, a phenomenon expected to become more acute in the coming years. As a result, there will be a continuous drop in the proportion of the population aged below 20

1 A large number of immigrants entered the country illegally and are not recorded in the statistics.

Table 1: Forecasts of GNP, employment growth rates and the rate of unemployment

Year	Percentage change of GNP	Percentage change of employment	Rate of unemployment
1996	2.47	1.4	10.4
1997	3.20	1.5	10.2
1998	3.31	1.4	10.1
1999	3.89	1.5	9.9
2000	3.99	1.6	9.6
2001	3.30	1.5	9.4
2002	3.58	1.4	9.3
2003	3.86	1.5	9.1

Source: Centre of Planning and Economic Research: Macroeconomic Model of Project LINK, unpublished data.

and a rise in that above 60. The ageing of the population is expected to cause ageing of the labour force, particularly in certain regions which have experienced significant outflows of prime-age persons. This has serious implications for the supply of labour, since it will reduce the scope for renewing skills and updating knowledge through the entry of young people. Besides the effect of demographic changes, the share of people under the age of 24 in the labour force is likely to keep decreasing because of the greater time spent on education or training.

Rising female participation rates and employment, continuation of their high unemployment

The upward trend in women's labour force participation rate is expected to continue. Given that new jobs are expected to come mainly from services, women's employment is likely to keep increasing faster than men's. However, because of the expected rise in participation rates, unemployment among women is not likely to fall significantly.

Declining activity rates of men in older and younger age brackets

Activity rates for men in the age brackets 45–64 and 15–19 have fallen considerably since the early 1980s. For older men, the fall can be attributed to the drastic decline of agricultural employment, the possibility for many workers, particularly those employed in the public sector, to receive pensions on various counts before reaching retirement age, and the rise in unofficial activity. Favourable arrangements for early retirement have also encouraged women's withdrawal from the labour force, but because of new entries their activity rates have not fallen. Recent legislative changes concerning retirement age and size of pensions are expected to restrict early withdrawal from the labour force and stop the downward trend in older men's activity rates.

The employment rates of people aged 15–19 have been on a downward trend independently of gender, although the decline has been stronger for men. This trend can be attributed both to an increase in the time spent on education and training and to the rise in unemployment. The continuation of this trend will depend largely upon what will happen with youth unemployment.

Slowly increasing employment and high rates of unemployment

In the middle and late 1980s, the growth rates of employment and the labour force did not differ significantly, so that unemployment fluctuated within relatively narrow limits. In the 1990s, employment has grown less than the labour force and in some years decreased. Consequently, the rate of unemployment has kept increasing, reaching a record-high level in 1996. Between 1985 and 1990, long-term unemployment increased to account for more than half of all unemployment; in the period 1990–95, it stabilised at around this level in relative terms.

The labour force is expected to increase faster than the population because of a continuation of the upward trend in women's participation rates and a tightening of retirement conditions (OECD 1996). According to forecasts, employment is expected to grow at a rate slightly higher than that of the labour force and as a result the unemployment rate will start a slow downward trend (Table 1).

Future developments in the levels of employment and unemployment will depend to a large extent on what will happen to the magnitude of unofficial activity. There is no formal evidence, but various indicators suggest an upward trend of such activities in recent years.

Increasing youth unemployment

Since 1985, youth unemployment has been increasing for both sexes. In 1995, the unemployment rates for young men and women were 3.0 and 2.7 times higher respectively than the rates for men and women as a whole. Given that overall unemployment is expected to be relatively high in the coming years and that the levels of knowledge and skills for most jobs are constantly increasing, this trend will not be reversed unless effective policies are applied to this end and significant improvements in the existing educational and vocational training systems are carried out.

Changes in sectoral employment

The drastic fall in the share of employment in agriculture and the significant increase in the share of employment in services seem to be part of a well-defined trend. This trend has been much stronger for female than male employment and is expected to continue.

Employment in industry increased slightly during 1985–1990, but started falling in the 1990s. Its share of total employment fell from 25.7% in 1985 to 23.2% in 1995[2]. In the case of men, the decrease was gradual, while women experienced a small increase in 1985–1991 and a sharp fall after 1992. In 1995, these shares were far below the EU averages, particularly for men. Taking into account the structure of industrial activity, the prospects of different sectors, the rapid technological advances and the need for further restructuring, we cannot anticipate a significant increase in the level or the share of employment in the industrial sector as a whole. If the size of unofficial employment declines, it will expand official employment in this sector, but this may be offset by a loss of jobs from modernisation and restructuring. According to forecasts, employment in manufacturing may stabilise around its present level or follow a slow downward trend.

Employment in services has been on an upward trend. Its share of total employment increased from 45.4% in

2 To ensure comparability with other EU countries, the data used in the discussion of trends come – unless otherwise stated – from the European Commission (1996a, pp. 147–162).

1985 to 56.4% in 1995. The expansion of public-sector employment accounts for part of this increase, but there have been other significant sources of growth as well. During 1985–1995, the rate of growth of women's employment in services was more than double that of men. This sector's share of total women's employment increased from 45.6% in 1985 to 62.2% in 1995.

All the evidence indicates that economic activity and employment in the country tend to depend increasingly upon services and that this sector will become the main source of new job creation in the future. Faster growth is anticipated in health, tourism and recreation, trade, transport and communications, and repair and servicing of electric and electronic appliances and installations. The upward trend of employment in the public sector is not expected to continue, nor that in finance, insurance or real estate, due to consolidation after years of rapid expansion and because of automation.

Slowly decreasing importance of self-employment

With the decline of agricultural employment and other structural changes, the importance of self-employment has been slowly declining. However, Greece continues to have the highest proportion of the self-employed among all EU countries. In view of anticipated structural changes and the high starting point, we can expect an acceleration of the downward trend of this proportion, particularly if there is a fall in unemployment.

Limited extent of part-time and fixed-term employment

Part-time employment has been of limited importance for both men and women despite recent legislative changes favourable to this form of employment. Between 1990 and 1995, the percentages of those employed part time increased from 2.2% to 2.8% for men and from 7.6% to 8.4% for women. For several reasons (cf. European Commission 1997, p. 8), it is not likely that there will be a considerable increase in the importance of part-time work in the near future.

Employment on fixed-term contracts decreased from 21.1% of all employees in 1985 to 10.2% in 1992. There has been little change since 1992. In 1995, it was 9.5% for men and 11.2% for women. Employment on fixed-term contracts has been used mostly by the public sector. Because of existing restrictions, in many cases hiring was done for short-term periods, which were afterwards extended. Therefore, it is difficult to make any predictions about changes in this type of employment without knowledge of future government policies in this regard.

In the private sector, according to existing legislation, a fixed-term contract loses its fixed-term character after a second renewal. If this legislation does not change, the scope for an increase in this type of employment in the private sector is relatively small.

Increasing proportion of youth in education/training

There has been a long-term trend towards increased participation by youth in education and training, particularly in the case of women at post-secondary institutions. Since 1992, the proportion of 20–24 year-olds in education/training has been higher for women than for men.

The proportions of 15–19 and particularly of 20–24 year-olds in education/training are lower than the averages in the EU for both men and women[3]. In view of this, and also because of the increase in secondary and post-secondary vocational education facilities and certain institutional reforms, we may expect a continuation of the upward trend in the proportion of youth in education/training.

Skills and occupational distribution

A trend observed in recent years and one that is expected to become stronger is the increase in the share of higher-skill occupations in total employment and the rise in the required levels of knowledge, skills and competence for almost all jobs. The employment decline in the primary sector and the significant expansion of the service sector are expected to reinforce this trend.

According to rough unofficial projections (KEPE 1996b), employment growth will be more than proportional for professional and technical and administrative and managerial occupations. Therefore, job opportunities are anticipated to be more favourable for those with post-secondary education or higher skills than for the low skilled.

Policy issues

Several policy issues are associated with the trends discussed in the preceding section. The phenomenon of the ageing of the population and labour force entails a wide range of implications calling for systematic policy action to deal with problems such as reduced entry of the young age cohorts into the labour force and changes in its composition, the greater difficulty in renewing knowledge and skills, increase in old-age dependency ratios and pressure on the social security system, which in Greece is already under serious strain.

The trend towards rising female participation in employment may prove to be a powerful counteracting force to the impact of population ageing. This trend could be strengthened with policies aiming to promote equal opportunities, facilitate women's reentry and increase their possibilities for reconciling working and family life, making the tax system more employment-friendly and securing employment conditions that could eliminate the "discouraged worker" phenomenon. Policies to increase the employment participation rates of the young by raising employment opportunities, making the functioning of the labour market more efficient and improving their school-to-work transition and integration into the labour force could create additional favoura-

3 The actual proportions for the Greek population are likely to be higher because the official data do not include students in post-secondary institutions abroad.

ble effects. Reorganisation of the educational and training systems to eliminate waste and demotivation effects and at the same time creation of possibilities for those who want to reconcile work with education or training are other major areas requiring innovative policy intervention.

The rapidly changing and constantly increasing skill requirements and the ageing of the labour force create a need to establish an institutional framework that will provide possibilities for lifelong education and training to an increasing part of the work force. Developing new forms of learning, such as distance education and training, and establishing mechanisms for providing effective professional guidance and general support to both new and old members of the labour force looking for work are other important policy areas requiring attention.

The way retirement has been organised has so far had negative effects on participation. Certain reforms in the early 1990s are likely to reduce early withdrawals, but there is a need for further action to keep people longer in the labour force. Also, there is a need for measures to increase efficiency in the administration of the social security system, since the fiscal burden from ageing is likely to become very heavy.

Employment in the coming years is expected to grow at a rate that will bring about only a small reduction in the unemployment rate. Therefore, policies are needed to strengthen the scope for economic growth. Increased investment in physical capital, upgrading of the labour force and more flexibility in the labour market are areas where systematic policy action is required. Unemployment could be reduced considerably by policies to eliminate inflexibilities and improve the functioning of the labour market. Problems in this regard have been contributing significantly to unemployment since 1981 (Petraki Kottis & Hatziharitou 1997). The problem of labour market segmentation, particularly with regard to the privileges enjoyed by employees in certain segments of the public sector[4], as well as the high levels of unemployment of specific groups such as youth, women, university graduates, etc. are issues that require particular attention.

According to rough forecasts, considerable regional labour imbalances are likely to appear. Moreover, the ageing of the population and labour force is anticipated to be more pronounced in certain areas of the country, and this could have considerable negative effects on their growth prospects. The existing high degree of dependency of a large number of areas upon a few manufacturing industries may create additional problems. Therefore, there is need for growth and employment policies with significant regional and sectoral dimensions and specific targets for local development.

Developments in the past and expectations about the future indicate that small-scale industry and small and medium-sized enterprises are going to be very important for employment creation in the coming years. Therefore, policies are needed to improve their efficiency and strengthen the creation and survival of such enterprises.

Concluding this article, it should be noted that in order to enable policymakers to deal effectively with problems associated with future developments in the Greek labour market, medium and long-term forecasts, supported by the appropriate analytical studies, are needed. Therefore, it is important that such work receives high priority in the research agendas of the relevant organisations, even if this would lead to frequent revisions.

Athena Petraki Kottis

4 The prospect of getting a job in the public sector, which is usually associated with job security, light workloads and guaranteed promotion possibilities, has encouraged many young people to wait in unemployment until they are able to obtain such a job (Demakas & Kontolemis 1996).

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Spain

Forecasting in Spain

Few public or private institutions make regular medium- or long-term forecasts of population, labour force participation, employment or unemployment for the Spanish labour market. Most significantly, the Spanish National Bureau of Statistics (*Instituto Nacional de Estadística* – INE) has developed a major forecast of the total Spanish population by age group and gender. Forecasts of participation rates by age group and gender have also been made.

In addition, some private institutions (study services of major banks, economic analysis institutes linked to universities, private economic institutes) have built econometric and macroeconomic models of the Spanish economy and regularly publish forecasts of economic variables (production, prices and wages, employment, interest rates, etc.), either for their own use or to sell them to other institutions. Characteristic of all these forecasts is their short-term orientation (i.e. they usually calculate data for one or two years only) and their tendency to only give information on aggregate and sectoral employment but not on participation rates. For these reasons, in this report we focus on the projections made by the INE in the following two areas for the next two to three decades: demography and migration, and labour supply (participation).

Major trends

Population

In 1995, the INE published a major forecast of the total Spanish population. The data were disaggregated by one-year age cohorts and by gender at different geographical and administrative levels (national, regional autonomous communities and provincial levels). The time span was 1990–2020 (for the country as a whole) and 1990–2005 (for regions and provinces). The forecast was based on data from the most recent Population Census (1 March 1991).

Based on various assumptions regarding mortality, migration and fertility (the latter being the most important element, given its sharp and consistent decline since the 1970s), the projections yield the following results. First, the population growth rate decreases over the period 1991–2009. At that point, the growth rate is zero and it turns negative thereafter. Population therefore peaks in 2009 (39.8 million), whereas it is only 39.2 million at the end of the projection period (2020), equal to the 1995 figure. Second, the results vary when alternative fertility hypotheses are used. Thus, in the "optimistic" scenario, total population starts decreasing in 2013; however, in the "pessimistic" scenario, total population starts to fall in 2003. The difference in total population between both hypotheses amounts to 2 million in 2020. These results make it clear that the outcome is highly sensitive to assumptions about fertility.

The results of the projections are also very revealing with regard to age structure. First, the population over 64 grows substantially during the 1990s, the rate of growth falls in the next decade (due to the arrival of the generation born during the 1936–39 Civil War), only to rise again in the next decade. Second, the population of working age (16–64 years) grows during the first 15 years at an even rate, but it declines at the same rate between 2005 and 2020. Third, the population under 16 declines during the first decade (1991–2000), but subsequently remains more or less constant. The result of all these tendencies is that the working-age population as a proportion of the total population remains more or less stable during the entire projection period. It is 65% in 1990, increases to 67% in 2000, and then gently declines to less than 65% in 2020. At the same time, the proportion of those over 64 increases from 14% in 1990 to 20% in 2020.

Labour force

Although some other forecasts of the labour force have been made by various organisations and academics, the INE has carried out the first official forecasts of participation rates in Spain. They cover the period 1993–2008 and are disaggregated by age group and gender. The methodology is based on the extrapolation of past participation data as they are calculated from the Labour Force Survey data from the first quarter of 1977 to the fourth quarter of 1993. The extrapolation is made using either a simple linear model with lags or a logistic curve to the basic data. Most significantly, no account is taken of the possible influence of the economic situation, which in Spain has proved to be a significant factor, with a pro-cyclical effect on participation rates, especially among women.

The finding is that the participation rate increases in the projection period, but that the majority of the changes are concentrated on the first segment (1993–98). The total participation rate increases from 49.1% in 1993 to 52.2% in 1998 and then declines to 51.8% in 2008. For males, the participation rate declines steadily: from 64.0% in 1993 to 63.8% in 2008. This is due to reductions within the groups of young and older people: the participation rate for those aged 16–19 declines from 28.3% to 15.6%, and for those aged 60–64 from 46.3% to 28.4%. For females, the participation rate increases during the first period (from 35.2% to 39.8%), and then remains stable. In this case, the changes are the outcome of a reduction in the participation rate of the 16–19 group and an increase for the rest of the groups in the first segment; after 1998 the increase is confined to those groups over 30.

Employment and unemployment trends

The unemployment trend in Spain differs from that of other western European countries. Movements in the employment-population ratio have been more intense than elsewhere in the Union, resulting in a significant rate of relative employment volatility for the Spanish economy: the employment-population ratio declined from 51% in 1974 to 38% in 1985 and has followed a cyclical pattern around the 39% mark since then. We now turn to various specific dimensions of employment and unemployment to study their past trends and possible future development.

Employment

Gender distribution

The gender distribution of employment shows a rise in the relative importance of female employment. This happened not only in periods of expansion (such as the second half of the 1980s), but also in periods of crisis (in the last recession, employment adjustment affected almost exclusively male employment). The result is that the female share of employment now stands at 35%, five points higher than ten years ago. As this development is related to the growing importance of the service sector, it seems plausible to assume that the trend will continue in the future.

Age distribution

The evolution of employment by age group shows that the only category increasing their employment share is that of the 25–54 year-olds, now representing 75% of total employment. The decline is concentrated on the lowest and highest groups (16–19 and 55+), in particular in recession periods. These are times when firms reduce employment using two types of device: the non-renewal of fixed-term contracts (primarily affecting the youngsters) and the use of early retirement. It is difficult to assess whether this process will continue in the future. However, if we combine this trend with the increasing female share of employment, it seems that some sort of substitution of younger and older workers by prime-age mature males and females will continue in the future.

Sectoral developments

Since the 1960s, agricultural employment has experienced a strong and uninterrupted downward trend linked to the modernisation of the sector. Initially, this process went hand in hand with rural-urban migratory flows; subsequently, the retirement of agricultural workers has also been an important factor. In the period 1976–96, the share of agricultural employment fell from 22% to 9%. This proportion is higher than in other European countries and is expected to keep falling, although at a slower rate. There has been a persistent, albeit slow, decline in the employment share of the manufacturing industry (from 27% to 20%). The most significant feature is that employment gains during recoveries are not sufficient to counterbalance job losses during recessions. Thus, the trend is similar to that observed in other western economies. Construction employment has largely followed broader employment trends, maintaining its employment share at around 9–10% during the entire period. This is expected to continue in the years to come. Finally, the service sector has experienced a strong relative increase, its employment share rising relatively steadily from 41% to 62%. A slower rate of increase is expected in the future, given that declines elsewhere in the economy are likely to be less severe.

Skills/occupational distribution

Once agricultural occupations are taken out of the analysis, the clearest finding revealed by analysis of the evolution of Spanish occupational structure is the increase in non-manual occupations: from just under 36% in 1977 to 45% in 1993. Within this broad group, two categories experienced the fastest growth: "professionals and technicians" (the share of which almost doubled, from 7.5% to 14%) and "other clerical workers". The proportion of the former is likely to keep increasing in the future, since it is smaller than in other parts of the Union. The latter is the residually defined sub-group within the larger group of "administrative and clerical workers", being the fastest-growing category. This trend implies a distinctive characteristic of the occupational shift in Spain towards new administrative jobs. These changes have been mirrored by a decrease in the proportion of manual production workers, whose share fell from 44% to 35%. The conclusion is that the Spanish economy has experienced a process of skill upgrading which is expected to continue: production work is being progressively replaced by non-manual work.

Contractual arrangements

The actual working time of full-time employees has shown a slight decline over the past decade, but is still rather high for European standards: 42.5 hours for males and 41 hours for females. A reduction may be expected in the future. However, the proportion of part-time workers has risen, particularly among women: at present, 17% of employed women work part time (up from 11% in 1991). Most observers expect that part-time work will keep increasing over the next few years.

As for contract tenure, one of the distinctive characteristics of the Spanish labour market is the sharp increase in the proportion of workers with fixed-term contracts during the 1980s, reaching a figure of 33% in 1991. Since then, that proportion has remained more or less stable. It is expected that the incidence of fixed-term contracts will be reduced in the future since trade unions and employer organisations have recently agreed to promote the use of permanent contracts and to reduce instability in employment relationships.

Unemployment

The rise in the Spanish unemployment rate has been inexorable since 1970; it was especially sharp between 1976 and 1985, when it peaked at 22%. The subsequent recovery of employment did not translate itself into a major decline of the rate of un-

employment, which stood at 16% in 1990–91. The subsequent crisis led to record unemployment levels, close to 25% in 1994. The recent recovery has reduced the unemployment rate, which at the moment of writing (second quarter of 1997) stands at 20.9%. This seems to imply that, after the sharp structural rise in unemployment in the decade 1975–1985, the Spanish unemployment rate is fluctuating cyclically around 18–20%. Given the expected increase in the labour force at least until 2005, and ignoring any negative shock, it is obvious that the Spanish economy will need intense employment creation in order to reduce unemployment below that threshold. If this does not occur, unemployment will remain at high levels.

Gender and age incidence

When we split up the unemployment rate by gender and age group, some interesting results emerge. The first is the different incidence of unemployment among men and women. The unemployment rate was the same for both sexes in 1977, but since then it has been higher for women than for men. In fact, the massive entry of women into the labour force during the second half of the 1980s meant that, while the male unemployment rate started decreasing with the recovery in 1986, the female unemployment rate kept increasing until 1988, thus extending the gap between the two rates; since then, the gap has remained stable at around 12 percentage points (although, due to the different participation rates, the unemployment-population ratios are very similar for both genders). These trends suggest that unemployment differences by gender will continue, and that the incidence of unemployment will remain higher for women than for men.

Turning to the relationship between age and unemployment rates, some results are worth noting. For males, a negative relationship between unemployment and age is observed; unemployment rates are markedly higher for the youngest (16–19, 20–24 and 25–29) while they are similar for the other age groups. For females, all groups except the youngest ones experienced increasing unemployment rates during the period 1975–1996, reflecting the fact that increased participation in the labour market has been linked not only to increased employment rates, but also to increased unemployment rates. If, as is likely, these trends continue in the future, we expect the differences between the unemployment rates for younger males and mature and older people to remain, and unemployment among mature and older females to worsen.

Policy responses

Population projections indicate that the working-age population will reach a maximum in the early 2000s, after which it will tend to decline. By 2020, the population of working age will have returned to its 1990 level. However, there will have been very significant changes in its age composition: the proportion of those between 45 and 64 years of age will have increased substantially. These trends are highly significant because, on a long-term view, Spain, the country with the highest unemployment rate in the European Union, might start experiencing labour shortages.

Moreover, the ageing of the total and working-age population will lead to an increase in the dependency ratio (measured as the ratio of people aged over 65 to those aged 20–65) in the 2010s and 2020s, as some studies point out. This poses some challenges to policy-makers. During the 1980s and 1990s, some specific age-related responses to the sharp increase in unemployment and its persistence were observed: through an extension of school education and the promotion of early retirement, the focus was on reducing the participation rates of young and older people. This caused a slight growth of the dependency ratio, which will accelerate in the future when younger (smaller) cohorts reach the labour market. The problem will be how a smaller labour force can maintain a larger group of inactives (young people enrolled in the education system and a massive group of pensioners). Thus, policy-makers will probably have to reverse their approach, fostering the early entry of young people into the labour market and employment, extending working life and putting restrictions on early retirement. Training policies aimed at giving continuous training to older people and maybe a change in attitudes in the nature of paid employment itself will have to be implemented and developed. The result would be an increase in total labour force and employment in order to counterbalance the increase in the dependency ratios.

Alternatively, if all these age-related policies do not work, the Spanish economy will have to rely on migration. Thus, at some point in the future the current restrictions on immigration would have to be reversed in order to facilitate immigration to bolster the reduced Spanish labour force.

In any case, given the current magnitude of unemployment and its expected persistence for years to come, none of these responses are likely to be adopted in the short or medium term and do not dispense with the need for intense job creation over the next 10 to 15 years.

Luis Toharia

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France

Four institutes are responsible for drawing up medium-term prognoses for the French economy:

- The OFCE (*Observatoire francais des conjonctures économiques* – French Economic Observatory) and the INSEE (*Institut national de la Statistique* – National Statistics Institute) as public bodies; and
- The BIPE (*Bureau d'informations et de prévisions economiques* – Bureau for Economic Information and Forecasts) and the REXECODE (*Centre de recherches pour l'expansion de l'économie et la développement des entreprises* – Research Centre for Economic Expansion and Corporate Development), as independent institutes.

Medium-term macroeconomic prognoses and their findings on employment and unemployment

According to the *prognosis by the OFCE,* economic growth of 2% is expected in France over the medium term, whereby two phases are distinguished: until 1998, the French economy will enjoy a phase of moderate growth recovery with market-GDP growth of around 2.5%; subsequently, growth will weaken to an average rate of less than 2% per annum. While the results of the *REXECODE prognosis* to the year 2000 are similar to those predicted by the OFCE, the *BIPE* is more optimistic: over the period 1996 to 2001, average annual growth is predicted to exceed 2%. Following the disappointing results of 1996, the economy is expected to pick up, with growth reaching almost 3%[1]; at the start of the next decade, however, the economy will experience a cyclical weakening of growth. To a greater extent than the other institutes mentioned, the BIPE pins its hopes particularly on faster recovery of private consumption. The scenario put forward by *INSEE* is based on higher average annual growth in the French economy.

Although a relatively high degree of convergence exists in the forecasts for the macroeconomic prospects of the French economy, the labour market prognoses given by the institutes *vary considerably with regard to employment and the unemployment rate,* in line with the assumptions made in each case. A number of questions need to be addressed:

- Will female participation rates continue to rise? – The difference between female and male rates in the age group 25–49 remains very pronounced (78% versus 96%).
- Will the trend towards longer periods in education come to an end or at least slow down? – Participation rates among young people in France are among the lowest in Europe and the longer time spent in education retards the labour market entry of 100,000 young people every year[2].
- Will the retirement age continue to decline? – In 1980, four out of five men aged between 55 and 59 were in employment; by 1995, this had fallen to three out of five.
- Will the growth of part-time work (3.5 million jobs) and of subsidised employment (450,000 jobs in 1996) continue to offer the working-age population, particularly the inactives, a means of entry into the labour market[3]? – Thanks to these forms of employment, the labour force rose by 300,000 in 1996, exceeding all forecasts.

The OFCE is the only institute forecasting a rise in unemployment, i.e. predicting that within the period under consideration the number of additional jobs will be insufficient to absorb the growth of labour resources: Its most favourable scenario predicts an average of 19,000 additional unemployed per year between 1996 and 1998; unemployment will subsequently continue to rise, albeit far more slowly. In contrast to the OFCE, the *REXECODE* predicts a decline in the unemployment rate (0.4 percentage points between 1996 and 2000). The difference can be explained by the assumption of a lower rate of growth of labour supply (of the order of 100,000 potential additional employees per year, compared with 140,000 according to the OFCE). Thus, the employment growth forecast by REXECODE (of 0.6% per annum on average) would be sufficient to absorb the new entries to the labour market. *INSEE* takes the view

Table 1: Comparison of the principle medium-term macro-economic scenarios by the leading institutes

	INSEE		REXECODE		BIPE	OFCE
Average annual % change	1996–1998	1999–2001	1996–1998	1999–2000	1996–2001	1996–1998
GDP	2.4	2.7	2.0	2.0	2.2	2.0
Market GDP	2.6	3.3	2.1	2.2	2.5	2.1
Imports	5.0	5.4	3.9	4.1	5.2	4.6
Exports	4.8	5.4	4.6	5.4	5.0	4.8
Private consumption	1.8	2.6	1.8	1.7	2.0	1.9
Corporate investment	6.8	6.3	4.3	3.0	3.8	3.5

Sources: OFCE, Bernard Barbier (1996/97) and BIPE.

1 It is to be noted that the government has based its budget plan for 1998 on economic growth of 3%.

2 At the start of the 1980s, almost 50% of the 15–24 year-olds were gainfully employed, whereas this figure is now less than 30%.

3 Inactives do in fact profit from such possibilities for labour market entry.

that job creation will be at a relatively high level (2% in the private sector, excluding agriculture, 1% in the economy as a whole), and unemployment will fall steadily (by 0.5% per annum).

Between now and the year 2001, the *BIPE* forecasts an increase in employment of 0.7% per annum; this implies the creation of one million jobs. The Institute arrived at this prognosis on the basis of the following assumptions:

- The proportion of active to total population remains stable over the medium term (at around 44%, as during the period 1980–1995).
- The growth of the working population does not slow between now and the end of the century, whereby the Institute assumes that the declining participation rates in the upper and lower age categories will be offset by the rise in female employment. The working population increased by 130,000 per annum between 1982 and 1995; this growth is expected to continue over the medium term.
- The realised continual enrichment of job content in growth areas is paralleled over the medium term, by the trend towards part-time work, in particular in the tertiary sector.

Unemployment is forecast to ease slightly (to 10.5% in 2001), comparable to the reduction recorded between 1987 and 1990.

Yet, in accordance with the BIPE's assumptions, this overall trend conceals significant sectoral differences:

- The level of employment in the agricultural sector will continue to decline at a rate scarcely lower than during the period 1980–1995.
- The number of jobs in industry is expected to decline by around 25,000 per annum in the course of the next five years; an expansion of temporary work[4] could partially offset this trend, however[5].
- Job creation will be concentrated in the tertiary sector, in particular due to the expansion of part-time work. Thus, this sector is the source of the renewed employment growth[6].

Long-term labour market prospects[7]

In the longer term, the first question relates to demographic development. This is an "equation with three unknowns": fertility, mortality and migration. There is little point in formulating a hypothesis regarding the birth rate in the year 2015, at least at present, as in that year those now being born will have just reached the age of 18. The two other unknowns are important, however, as in France the mortality rate has consistently been exaggerated and net immigration consistently underestimated. The INSEE, for example, makes its calculations on the basis of net immigration of 50,000 per annum, whereas other observers generally assume at least 100,000; extrapolated to the year 2015, this difference represents almost one million people.

As far as these considerations are concerned, the central trends of demographic development are dominated by two strong elements:

- a clear decline in the rate of population growth,
- substantial ageing of the population, due both to longer life expect-

4 In 1996, there were 332,000 temporary jobs (measured in full-time equivalents); 52% of part-time workers were employed in industry.

5 Firms are increasingly planning both their personnel and their production in line with the principles of "just in time", and temporary work, the most flexible form of human-resource management, enables the necessary adjustments to be made. Agency workers rendering services to firms are counted as part of the tertiary sector.

6 In particular, private services (70,000 jobs created in 1995), producer services (40,000) and trade services (26,000 jobs created in distribution).

7 Considerations concerning labour market prospects in France over the next 20 years on the basis of work conducted by the BIPE.

Table 2: Employment and unemployment: medium-term forecasts (in thousands)

	1980 level	Annual change 1980–1995	1995 level	Annual change 1995–2001	2001 level
Private-sector employment (excl. agriculture)	13,309	–3	13,265	140	14,100
Total wage/salary employment	18,466	87	19,777	185	20,890
Self-employment	3,476	–62	2,549	–25	2,400
Total domestic employment	21,942	26	22,326	160	23,290
Active population in employment	22,012	34	22,518	160	23,480
Active population	23,504	131	25,469	130	26,250
Unemployment according to ILO definition	1,562	93	2,950	–30	2,770
Unemployment rate	6.4%		11.6%		10.5%

Source: BIPE.

Table 3: Employment trends by sector (in thousands)

	1980 employment	Annual change 1980–1995	1995 employment	Annual change 1995–2001	2001 employment
Agriculture	1,850	–55	1,026	–35	820
Industry	5,717	–96	4,275	–25	4,120
Construction	1,913	–30	1,467	–10	1,410
Tertiary sector	7,661	110	9,311	190	10,450
Non-market services	4,801	96	6,248	40	6,490
Total	21,942	26	22,326	160	23,290

Source: BIPE.

Table 4: French population growth (in %)

1955/75	1975/95	1995/2015
+22.6%	+10.4%	+7.9%

Source: BIPE.

ancy and the fact that the baby-boom generation will reach the age of 60 in 2005. Over the next 20 years, population growth will be concentrated in the 45–60 age category (which is expected to expand by 40%) and among the over-60s, most of whom will have left the labour force (35%).

Thus, by the middle of the next century the age pyramid in France will resemble a rectangle divided into six more or less equal slices, each accounting for 15–17% of the population.

The second question relates to employment, labour supply and the participation rate. In order to determine these trends, five variables were subjected to detailed analysis: changes in labour productivity; collective and individual reactions to the continuous decline in the ratio of employment to adult population; behavioural changes by age and by gender; changes in the reduction of the annual number of working hours.

1. The growth of labour productivity (per working hour) has remained approximately equal to that of value added, or even slightly higher. This trend could continue in the future due to the rapid productivity growth made possible by the revolution in communications and to the increasingly "flexible" organisation of firms, or to the growth of less highly regulated forms of employment in which workers are more responsible, more independent and more involved in the work process. Factors opposing this trend include the slow diffusion of automation in services, which are all but inaccessible to genuine productivity growth, the "fiscalisation" of the cost of social security, which encourages firms to pursue a policy of "capital saving", and personnel planning that, by expanding apprenticeships and recruiting the unemployed, is integrating a section of the population into the labour market which is

Table 5: Ratio of employment to adult population to the year 2015 (in thousands)

	1955	1975	1995	2005	2015
Employment (1)	19,314	21,404	22,326	24,700	25,927
Population > 15 years (2)	32,757	39,944	46,634	49,329	51,854
(1)/(2)	59.0%	53.6%	47.8%	50.0%	50.0%

Source: BIPE (January 1997).

Table 6: Employment, active population and unemployment (reference scenario)

	In thousands			Annual average change in thousands	
	1975	1995	2015	1975–1995	1995–2015
Domestic employment	21,409	22,326	25,822	46	175
Active population in employment	21,460	22,518	26,014	53	175
Active population	22,372	25,469	26,491	155	51
Unemployment	912	2,951	477	102	–124
Unemployment rate in %	4	12	2		

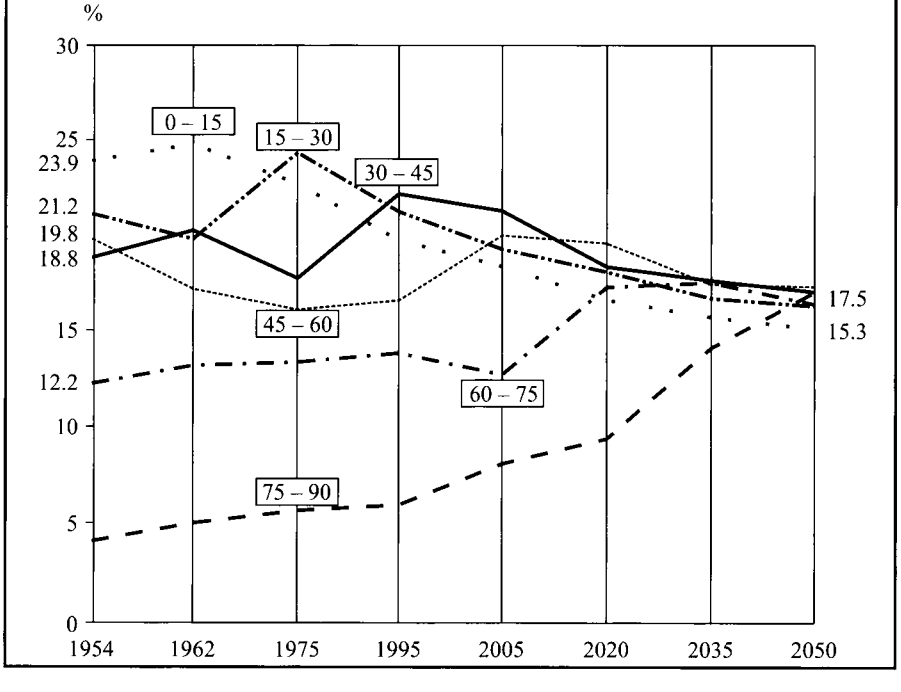
Source: BIPE (January 1997).

Table 7: GDP, employment, working time and productivity (reference scenario)

	Average annual change in %	
	1975–1995	1995–2015
GDP	2.2	2.3
Labour productivity per hour	2.6	2.1
Activity	–0.4	0.2
Working time	–0.6	–0.5
Employment	0.2	0.7
Per capita productivity	2.0	1.6

Source: BIPE (January 1997).

Figure 1: Forecasts of population trends by age category



not exactly highly productive. For its scenario, the BIPE assumes that trends will increasingly diverge, leading on balance to a slight increase in the overall number of working hours.

2. The number in gainful employment as a proportion of the population will continue to decline. The desire of many employees for periods in which they can escape the constraints of employment, more rigorous selection by firms in favour of highly productive employees and continued attempts to cut costs and thus shed labour (productivity reserves) all suggest that this trend will be maintained. Yet there are also factors running counter to this trend: the desire to no longer support "interminable" retirement, the disequilibrium in pension financing and the inclusion of periods in training and performing community work in working time (cf. the "Rapport Boissonat"). The central assumption behind the BIPE scenario regarding the ratio between employment and the adult population is that a 50:50 relationship will be re-attained, implying the creation of 3.6 million jobs by the year 2015.

3. For 20 years now, the labour market has increasingly concentrated on the employment of workers from the 25–55 age group, while excluding the young and the "old". The trend towards longer school education is likely to continue, reinforced by the difficulties young people expect in gaining access to further vocational training. Technical developments are occurring at such a rate that the skills of those aged over 50 are devalued, strengthening the desire for early retirement. This trend could be reversed, however, by means of significant changes in the system of vocational and further training, the application of lifelong learning and by utilising the scope to re-deploy older workers (for example for administrative tasks in the area of social services), in view of the necessity of remaining productive for longer in order to ensure an adequate pension.

Yet it needs to be underlined that the "double squeeze" on the working population on the age scale was only possible in economic terms because it applied to two very different generations (early retirement for those generations who had entered working life very early, longer periods in education for younger generations); now the latter, who entered working life between the ages of 22 and 24, will have to work until they are 62 to 64. The BIPE assumes that participation rates among young people will remain at their current level (30%) and that the average retirement age in 2015 will once again be 64 years.

4. In the long term, a growing trend towards an equalisation of conditions between men and women can be observed. Given the current level of inequality and the effects of France catching up with the Nordic model, this trend could well continue. On the other hand, the milder form of feminism in the younger generations, who, used to gender-mixing, recognise that respecting differences is more important than equality, and the hypothesis of an increasing importance given to private lives, which is likely to re-accord a central place to the mother, constitute factors exerting a contrary effect. For its scenario, the BIPE assumes that, at least for the 25–54 age group, the difference in participation rates between the sexes will narrow to the current level in the Scandinavian countries (between 5% and 8%). This assumption is also based on the significant expansion of parental leave expected during the next 20 years.

5. Measured over a period of 40 years, the reduction in annual working time amounts to around 0.6% per annum. This is equal to the "loss" of 55 working days, half of which are accounted for by holidays and half by part-time working (flexibilisation of weekly and daily working time). Elements reinforcing this trend include the increasing stress of working life, under the pressure of which "breaks" have been increased; individual wishes for preserving personal lives; the increasing synchronisation of the working rhythms of parents and the educational rhythms of children; and public job-creation measures. Opposing trends include the pressure on firms' competitiveness, which suffers from additional holiday entitlement and part-time work when it is synonymous with "amateurism", and the "revealed preference" for income over leisure. The hypothesis underlying the BIPE scenario is based on contrasting developments in different age groups:

- For the under-25s and the over-55s, an increase in part-time work (half standard hours);
- For the 25–55 age group, an increasing flexibilisation of working time corresponding to periods of intense family life (while part-time work will remain more important for women, the difference between the sexes will narrow substantially). This will lead to a diversification of employment situations. One-third of the 25–55 age group will work less than 1,000 hours per year, another third between 1,000 and 1,800 hours and the last third more than 1,800 hours per year.

Analysis of all these factors and of the various initial hypotheses used by the BIPE has led to the development of a reference scenario[8], the main components of which are presented in Tables 6 and 7.

Concluding remarks

While the medium-term prospects described by the various institutes for the next five years should convince the authorities of the necessity of continued mobilisation on the employment front in the coming years, analysis of the prospects over the longer term (20 years) suggests that the unemployment rate could fall significantly – largely, although not exclusively, due to demographic changes – provided that the French economy maintains a given level of economic growth. Such an analysis could encourage a wait-and-see attitude. Yet if labour productivity and the competitiveness of the French economy are to be maintained, further efforts must be made to limit the incidence of precari-

8 Two other scenarios were also elaborated: a trend scenario and a scenario in which trends to the year 2000 are maintained over the period 2000–2015.

ous employment and labour market exclusion and to promote continuous further training as a response to the devaluing of skills by rapid technological progress. The 20-year models are unable to predict the disastrous effects that would result from the neglect of entire sections of the population, particularly of young people. The return to full employment within the next 20 years (perhaps even sooner) can only be envisaged if government and economic actors continue their efforts in the areas of employment and vocational training.

Sandrine Gineste

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IRL Ireland

Sources and background

The most substantive forecasts of employment and unemployment carried out in Ireland are those contained in the *Medium-Term Reviews* of the Irish economy published by the Economic and Social Research Institute (ESRI) at intervals of approximately two years. This series of reviews commenced in 1986; the most recent report was published earlier this year in April 1997 (Duffy et al. 1997). While the main emphasis in these reports relates to the output and financial aspects of the economy, they also contain forecasts for the labour force, employment by sector and unemployment. In the most recent report, these data are provided on an annual basis up to the year 2003, with more summary indications for the period up to 2010.

It should also be noted that in 1996 the State Industrial Development Agency, Forfás, published labour force and employment forecasts as part of a wider economic strategy covering the period up to the year 2010 (Forfás 1996). The employment aspects of this report are reviewed briefly at the end of this paper.

The main domestic factors driving the growth performance outlined in the 1997 ESRI *Review* are the consolidation of a strong competitive position in an increasingly global international market, augmented by a sizeable expansion in the effective supply of labour. Other factors which are expected to aid this performance are the continued development of the physical infrastructure and a stable underlying domestic macroeconomic environment.

Turning to external influences, modest but steady growth in the world economy is expected over the forecast period. For the EU as a whole, annual average GDP growth is expected to be about 2.5% until the year 2000 and slightly lower at 2.3% between 2000 and 2005. The UK, in particular, remains a major market for Irish goods and labour, and developments in that economy can still have a substantial impact on the Irish situation. The outlook for the UK economy is positive, and it is assumed that growth will average 2.2% between 1997 and the year 2000, thus providing a reassuring backdrop to the forecasts for the Irish economy for the same period.

As the leading national economy, the performance of the USA has an important global influence. The prospects for the medium term are for stable expansion, with a growth rate averageing at least 2.1% during the 1990s and into the next century. The relevance here is that the Irish economy benefits significantly from foreign direct investment, much of which originates in the USA.

While the figures quoted for the different external regions indicate modest rates of expansion, on the basis of recent experience the expected scenario involves a sufficient level of external growth to enable the Irish economy to achieve annual average growth of up to 3 additional percentage points (i.e. in excess of 5% annual growth in total), with consequential beneficial effects in terms of increased job levels.

Demographic and labour force aspects

The *Medium-Term Review* forecasts are also dependent on a parallel set of assumptions and associated simulations relating to demographic and labour force change. These are, for the

most part, based on assessments of past trends and assumptions as to how particular demographic and labour force developments will evolve during the forecast period. These aspects relate to fertility patterns, marriage rates and estimations of the propensity to participate in the labour force.

Considering first basic demographic influences, Irish society will undergo radical changes over the next fifteen years as the full effects of the demographic changes of recent decades work their way through the population. Many of these developments are already inevitable, given the pattern of births, deaths and external migration over the past 25 years. In this regard, the key features are: a major increase in the proportion of the population in the working-age group; a rapid fall from the year 2000 onwards in the number of young persons entering the labour force; and a large reduction in the number of children.

The changes indicated for the different demographic components will give rise to a substantially altered Irish population structure in the years ahead. While the overall population total will show only a modest rise over the coming decade, averageing about 16,000 per year to reach a total of 3,780,000 by 2006, the numbers in both the "child" (less than 15 years) and the "youth" (15–24 years) categories will fall. In contrast, the numbers in both the 25–44 and the 45–64 age classes will rise, especially the latter "older working-age" group, whose share of the total population will rise from 20% to 24%. The numbers aged 65 years and over will also increase, but at a much more modest pace. The overall outcome is, therefore, a significant ageing of the Irish population, but one that will occur mainly within the broad "active" category covering persons aged between 15 and 64 years. These changes will clearly lead to a substantial, if temporary, decrease in the population dependency ratio.

These developments, when taken in association with changes in the propensity to participate in the labour force, effectively determine the scale and structure of future labour supply. With regard to labour force participation, the 1997 ESRI *Review* assumes a continuing decline in labour force involvement for young persons aged between 15 and 24 years (for both sexes), due primarily to increasing participation in education – particularly at tertiary level. As for tendencies towards early retirement, these are also expected to continue to contribute to a reduction in the male labour force, although, again, at a more moderate pace than in the past. However, the most significant development in this sphere relates to the ongoing rise in the labour force participation of women aged between 25 and 64 years. This is assumed to continue to increase strongly over the coming years, a significant contributing factor being the continued enhancement in the educational profile of women.

Table 1: Labour force classified by age groups in 1996, with forecasts for 2006 (in thousands)

	1996	2006
Men		
15–24 years	149	130
25–44 years	474	530
45–64 years	287	356
65 years and older	27	19
Total	937	1,035
Women		
15–24 years	119	109
25–44 years	302	415
45–64 years	112	188
65 years and older	6	5
Total	539	717
Total		
15–24 years	268	239
25–44 years	776	945
45–64 years	399	545
65 years and older	33	24
Total	1,476	1,753

Source: Special tabulations for the 1997 ESRI *Medium-Term Review* database.

Forecasts of output, employment and unemployment

Under the *Medium-Term Review* forecasts, the Irish labour force is predicted to increase from 1,476,000 in 1996 to 1,753,000 in 2006, an increase of over 275,000, or 1.7% on an annual average basis. Bearing in mind the demographic and behavioural trends just described, this increase will relate exclusively to the 25–64 age group. The labour force aged 15 to 24 years is predicted to fall; so also is that for persons aged 65 years and over. Nearly two-thirds of the total net increase will arise in the female work force.

The forecasts also envisage an annual average real GNP growth of some 5% between 1996 and 2001, and a marginally higher rate in the subsequent five years between 2001 and 2006 (Table 2). This is anticipated to generate employment increases of some 2.5% per annum in the first five-year period and of about 2% between 2001 and 2006. In terms of absolute employment gains, these rates of expansion are equivalent to an annual average increase of over 35,000 (net) between 1996 and 2001, declining somewhat to 31,000 in the subsequent five-year period. As these job gains exceed the anticipated growth of the labour force, this implies some reduction in unemployment. The national unemployment rate was 11.9% of the labour force in 1996; it is predicted that this will fall to 8.8% by the year 2001, and to under 7% by 2006.

Table 2: ESRI Medium-Term Review 1997–2003: major economic aggregates													
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	1996–2001	2001–2006
GNP (%)	6.4	5.7	5.9	5.3	4.4	3.7	4.5	5.3	5.6	5.8	4.0	5.0	5.1
Employment change (%)	3.6	3.1	3.9	2.9	1.5	1.5	1.7	2.2	2.2	2.3	1.8	2.6	2.0
Labour force change (%)	3.7	1.9	2.0	1.9	1.9	1.8	1.8	1.7	1.5	1.4	1.5	1.9	1.6
Unemployment rate (% of labour force)	11.9	10.9	9.1	8.3	8.6	8.8	8.9	8.4	7.8	7.0	6.7	–	–
Source: ESRI *Medium-Term Review* 1997–2003, April 1997.													

Sectoral employment

A sectoral sub-division of the employment forecasts for 2006 is given in Table 3. When these forecasts are compared with corresponding figures for 1996, they indicate a fall in agricultural employment and significant increases in virtually all other areas outside of this sector. The decline in the numbers at work in agriculture is mainly a demographic phenomenon characterised by retirements and deaths and a decline in the number of young persons entering farming. By 2006, the numbers employed in agriculture will have fallen to just over 6% of total employment, a proportion which is approaching the norm in many other EU countries.

The largest employment increases are expected to occur in market services (nearly 40% over the period in question), especially in the large "other market" services sub-category, which embraces a wide range of professional and personal services. It should be noted, however, that a significant proportion of the jobs in this area tend to be part time. Employment in non-market services is forecast to grow by some 26%, i.e. at much the same rate as total employment. Within this group, a somewhat higher rate of expansion is predicted for the health and education sphere, as distinct from central and local government administration.

Employment in manufacturing is forecast to increase by some 24% between 1996 and 2006. This is a feature of some significance, because in many countries, especially in the more developed larger economies, employment in manufacturing is at best static or even falling. The driving force behind this trend in Ireland is the high-technology sub-sector, covering areas such as computers, instrumentation and chemicals, which are largely under the ownership of multinational enterprises. This expansion derives both from employment increases in existing enterprises and new inward investment. Furthermore, in recent years, after a long period of difficult and painful restructuring, more traditional industries (in areas such as food production, clothing and textiles, etc.) have begun to record some employment increases. The forecasts for the manufacturing sector as a whole are predicated on the assumption that these trends will continue. Employment in building and construction is also expected to increase over the forecast period, at a somewhat slower pace than in manufacturing. This will be mainly dependent on continuing levels of economic growth and the pattern of physical investment envisaged over the forecast period.

Employment by occupation

The employment forecasts derived from the periodic *Medium-Term Review* computations are normally used as a basis for compiling a parallel set of occupational employment forecasts. This work is carried out under a joint contractual arrangement be-

Table 3: Employment trends by sector, with forecasts for 2006						
Sector	1991		1996		2006	
	In 1,000	Percentage	In 1,000	Percentage	In 1,000	Percentage
Agriculture	155	13.7	136	10.6	103	6.4
Manufacturing	232	20.5	251	19.5	312	19.3
Utilities	14	1.2	14	1.1	10	0.6
Building	78	6.9	86	6.7	105	6.5
Market services	468	41.2	588	45.8	821	50.9
– Distribution	173	15.2	193	15.0	262	16.2
– Transport and communications	66	5.8	80	6.2	113	7.0
– Other market services	229	20.2	315	24.6	447	27.7
Non-market services	187	16.5	209	16.3	264	16.3
– Health and education	118	10.4	135	10.5	173	10.7
– Other	69	6.1	74	5.8	91	5.6
Total	1,134	100	1,284	100	1,615	100
Source: ESRI *Medium-Term Review* 1997–2003, April 1997.						

tween the ESRI and the National Employment and Training Authority (FAS). A set of such forecasts is currently being prepared with 2003 as the target forecast year and will be published in November 1997.

The most recent set of occupational forecasts, with 1998 as the target year, were issued in March 1995 (Canny et al. 1995). While these still provide a satisfactory picture of changes in employment by occupation when viewed in a structural or distributional sense, it must be borne in mind that the predicted 1998 employment levels on which they were based are now too low, as the recent rapid increases in the numbers at work in the Irish economy were not foreseen when the forecasts were being prepared. It is, nevertheless, of interest to observe the rates of change for different occupations in a relative sense, even if the rates of expansion for individual occupations may be understated.

Figure 1 shows percentage rates of change for fourteen occupational groups for the period from 1991 to 1998. These results show that the fastest rates of employment growth relate to managerial and professional occupations (for which the possession of tertiary-level qualifications would generally be a requirement). However, occupations associated with service activities were also predicted to expand rapidly in areas such as sales, security and personal services. In the manual sphere, modest expansion at or about the national average was forecast for skilled craft activities, but rather more sluggish rates of growth for semi-skilled operatives in areas such as production and transport were predicted. The number of unskilled manual workers was expected to decline significantly. These results bear a marked similarity to those derived from similar employment forecasting exercises carried out in other countries.

Other forecasting exercises

As indicated earlier in the paper, the State Industrial Development Authority, Forfás, published labour force and employment forecasts in 1996 as part of a wider development strategy document. These projections, which were issued at a somewhat earlier stage in the current growth period than the more recent ESRI forecasts, indicate somewhat lower levels of future labour force and employment expansion. The work force is anticipated to expand by about 16,000 per year on average between 1996 and the year 2010, compared with the figure of some 26,000 given by the ESRI *Medium-Term Review* forecasts for the same period. Employment expansion is also predicted to be lower – 22,000 on average per year compared with a corresponding ESRI figure of over 30,000. However, the predicted fall in the unemployment rate (to about 6% by 2010) is similar to that forecast by the *Review* exercise, as the Forfás projections involve both lower levels of labour force and employment growth. However, the latter outcome emerges in a context where there would be some net population loss through emigration.

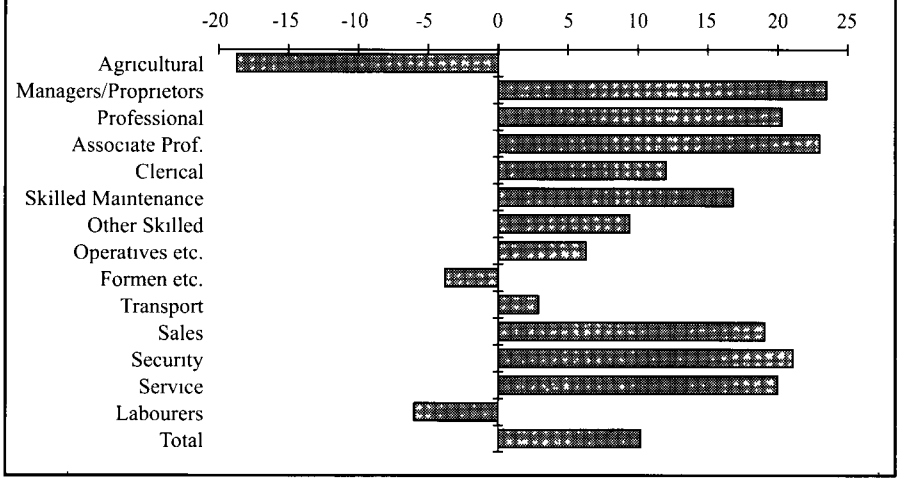
The main factors listed in the Forfás report as requiring urgent attention in order to achieve the growth performance indicated relate to the development of an "enterprise culture", i.e. a transformation in the capability of indigenous industry so as to improve levels of innovation and competitiveness and further development of the attractions that Ireland offers to foreign direct investment in terms of skill availability, infrastructure and incentives. The report also advocated reforms of the taxation system so as to establish an environment more conducive to innovation and commercial risk-taking.

Policy issues

There are a number of policy issues arising in the context of the socioeconomic scenarios portrayed by the above-mentioned forecasts.

The first relates to the probability of "economic congestion" arising as a result of the anticipated high growth rates. While this can occur across a wide spectrum of economic activities (e.g. in an infrastructural sense), as the labour market is concerned, the most likely problem could relate to the emergence of skill shortages. Even allowing for the known difficulties in obtaining accurate information on this aspect, there are signs that some skill shortages may be emerging in high-skilled areas and in the building and construction sector. While this has implications for the education and training systems, instant changes are neither possible nor desirable in these areas, even though the period over which the forecasts apply involves a sufficiently long-term perspective as to allow some corrective measures designed to meet genuine requirements to be taken. However, employers also have a responsibility in meeting such challenges, and it can indeed be argued that an adequate re-

Figure 1: Employment change by occupation 1991–98 (in %)



sponse from this source can be achieved relatively quickly and in a manner which focuses more effectively on the particular deficiencies involved.

A further important issue concerns the position of the long-term unemployed and other disadvantaged groups. Despite the impressive economic performance of recent years, long-term unemployment remains stubbornly high and only limited progress has been made in alleviating it. There is a growing concern that the fruits of economic progress have not extended to such groups and that further efforts or different approaches are needed in dealing with these problems. The ESRI *Medium-Term Review* emphasised that the "window of opportunity" temporarily afforded by falling dependency levels in the population as a whole should be utilised to address urgent quality issues in society, and to alleviate pockets of deprivation.

Another policy consideration relates to maintaining cost discipline. While there are many factors which contributed to the strong growth performance of recent years, maintaining competitiveness has been a fundamental element in the entire exercise. This was assisted by a series of moderate collective wage agreements which commenced in 1987. There are signs, however, that this consensus is weakening in the face of increasing numbers of "exceptional" wage claims, especially in the public sector. Indeed, in a wider context, there are disturbing signs that the prospect of continued growth is encouraging wholly unrealistic and unwarranted demands for increases in public expenditure. There will, therefore, be a need for both government and the social partners to ensure that the country's competitive position is not eroded by allowing undue concessions to be made in these areas. Past experience has indicated that the loss of competitive advantage in the Irish economy can quickly translate into reduced levels of economic growth and job creation.

Jerry Sexton

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Italy

Forecasting in Italy

In addition to the government, leading Italian forecasting institutes (such as Prometeia, Cer, Irs, Isco and Confindustria) publish forecasts of employment trends and unemployment rates within short- to medium-term forecasting scenarios for the whole national economy. Longer-term forecasts of labour market variables do not exist. Prometeia produces medium-term forecasts (5–6 years) at a relatively high level of disaggregation: labour demand is differentiated into self-employment and dependent labour, the latter by economic sector. Some efforts are also made to describe labour supply trends. The government labour market forecasts only cover employment trends and unemployment rates and they represent programmatic goals for the direction of economic policy for the following three years.

The National Institute of Statistics (ISTAT) and the General Accounts Office (GAO) report demographic projections for the coming decades. Those given by the GAO are conceived with a view to supporting government decisions about economic policy; nonetheless, they offer interesting considerations in relation to the working-age population trend.

With regard to the monitoring of employment trends by occupation as well as by educational attainment level, the Union of Italian Chambers of Commerce, along with the Ministry of Labour and the European Union, launched a "Permanent System of Information" called Excelsior in 1997. Each year a sample of about 90,000 firms which is representative of the whole country is contacted, with the exclusion of the agricultural sector and those sectors dominated by publicly owned firms. These firms were initially asked to state the number of persons in employment at the end of 1996 and to forecast the inflows and outflows for the following two years, that is 1997–98. Particular attention is paid to the type of professions that will be required in future by the firms. The extreme disaggregation of the information makes it possible to reproduce a capillary picture of labour demand.

Prometeia carries out systematic forecasts involving regional scenarios whose homogeneity facilitates interregional comparisons. The technique used to forecast regional variables is of the top-down type as far as the demand side is concerned, whereas it is

bottom-up for determining population flows and the consequent labour supply.

Major trends

Population projections and labour supply

Recent projections of Italian population trends for the next fifty years have been elaborated by both ISTAT and the GAO. The impacts on labour supply are derived from the projections relating to the working-age population. Various alternative evolutionary scenarios are presented. In respect to some variables, more extreme hypotheses are compared to a "trend" scenario, so called because it depicts an evolution that reflects the most recent population trends. The ISTAT and GAO scenarios present broadly the same trends for the coming years, although there are different assumptions (mostly by the GAO) and different methodological hypotheses.

The process of population ageing will continue: the number of births will decline by 265 units (especially after 2010), according to the GAO's scenario, and by 185 units for the year 2045, according to ISTAT. This decline in the number of births is not related to a further reduction of the fertility rate, but to a decrease in the number of women of fertile age, with fewer young and more elderly people both absolutely and as a share of the overall population-replacement rate (as shown in Table 1). As far as the working-age population is concerned (15–64), it will remain constant for a short period and then drop significantly, with a steady increase in the dependency rate.

Two central trends will characterise labour supply flows in the next few years: firstly, the decline in the working-age population (15–64) will continue; secondly, the rise in participation rates will also be maintained.

Participation rates are, however, currently below the European average. The pension reform should stop the fall of the male activity rate (among 50–69 year-olds, the rate declined from 58.9% in the period 1983–85 to 48.8% in the period 1993–95) thanks to the restrictions imposed on, for example, disability pensions and early retirement schemes for firms undergoing restructuring. On the other hand, the female activity rate will keep on rising. According to Prometeia, it will increase by four and a half points compared with today, peaking at over 51% in 2002. This tendency will be more accentuated in southern Italy, where female participation in the labour market (22.4% in 1995) is still far below the European average.

An important role will be played by immigration, which, however, is difficult to forecast[1]. Prometeia assumes a constant migratory flow. In that case, while the working-age natural population is forecast to fall in the years 1991–99, the total population could grow, whereby the increase would be entirely attributable to the male component; immigration is still predominately male. In the coming years, the working-age population could drop if the migratory flows fail to offset the decline in the native population.

The macroeconomic scenario and unemployment rates

The labour market picture drawn by Italian forecasting institutes for the next two to three years (and by Prometeia until 2002) is not particularly comforting. The Italian unemployment rate will remain at a high level for the next two years at over 12%. Not until 1999 is it expected to decrease. Only the government targets are more optimistic, aiming at an unemployment rate of 10.4% in 2000 (compared to 12.1% in 1996). Table 2 depicts Prometeia's scenario for 2002, which was elaborated in March 1997.

We will have to wait until 1999 to see a significant improvement in employment rates, as GDP growth will remain weak. However, it emerges that the elasticity between employment and economic growth willl improve slightly in the coming years, although it will still be significantly lower than in the early 1980s. On the whole, there are no significant differences between the rates of growth of dependent and self-employed labour. Atypical forms of employment (such as part-time, fixed-term and agency contracts) still play a marginal role in Italy, mainly due to restrictive legislation, whereas the various forms of "unofficial" employment are very

1 Until the early 1970s, Italy exhibited a negative migratory balance: outflows exceeded inflows. Since then, the balance has been positive and increasing. Data for 1995 show the presence in Italy of almost a million foreigners, of which 83% are from non-EU countries.

Table 1: Demographic data for Italy – trend scenario: low increase in fertility, reduction in mortality, stable migration flows

	1996			2000			2005		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
Old-age rate[1]	1.1	0.9	1.4	1.2	1.1	1.5	1.2	0.9	1.5
Dependency rate[2]	0.3	0.4	0.3	0.5	0.4	0.5	1.0	0.5	2.3
Replacement rate[3]	1.1	1.2	1.0	0.9	1.0	0.8	0.9	0.9	0.8

1 Population over 64/Population under 15.
2 Non-working-age population (<15, >64)/Working-age population (15–64).
3 Population entering working age (15–19)/Population exiting working age (60–64).

Source: ISTAT: Demographic projections, trend scenario.

Table 2: Labour demand and supply trends in Italy (annual percentage changes)							
	1996	1997	1998	1999	2000	2001	2002
Population	0.2	0.2	0.2	0.1	0.0	–0.1	–0.1
Working-age population	0.2	0.1	0.0	0.0	–0.1	–0.1	–0.2
Participation rate	60.1	60.3	60.7	61.0	61.4	61.8	62.1
Labour force	0.6	0.5	0.6	0.5	0.5	0.5	0.3
Total labour units	0.1	0.0	0.5	0.7	0.7	0.8	0.9
Self-employment labour units	0.3	0.5	0.6	0.9	0.8	0.8	0.7
Employees (full-time equivalents)	0.0	–0.2	0.5	0.7	0.7	0.9	1.0
– Agriculture	–3.0	–1.9	–1.4	–1.1	–0.9	–0.7	–0.7
– Industry	–0.5	–0.5	0.8	0.9	1.1	0.8	0.7
– Market services	1.6	0.4	0.9	1.1	1.2	1.7	1.9
– Non-market services	–1.0	–0.4	–0.3	0.0	0.0	0.1	0.3
Unemployment rate	12.1	12.4	12.5	12.3	12.2	11.8	11.3
Source: Prometeia: *Rapporto di previsione* [Economic Forecasts Report], March 1997.							

widespread[2]. Since the early 1990s, however, part-time and fixed-term employment have expanded and now exhibit a cyclical pattern similar to that of other European Countries. In the future, the introduction of agency work, the incentives for part-time work and the deregulation of fixed-term contracts under the recently approved "Treu package" should support the development of such flexible forms of employment.

Sectoral and occupational trends

The dynamics of dependent employment, according to Prometeia's data, varies between sectors: the public sector will continue to make a negative contribution to the development of jobs until 1999 because of restructuring and the present policy of cuts in government spending. In the agricultural sector, the process of labour shedding will go on, but less drastically than in recent years. As far as industry is concerned, the employment prospects are rather bleak. In 2002, industrial employment will be nearly three hundred thousand persons lower than ten years before. Employment in market services will increase thanks to the process of tertiarisation.

The main results that emerge from the Excelsior survey depict a labour market characterised by a slight increase in dependent employment in the years 1997–98 (+0.65%). The main contribution to this increase comes from the service branches of tourism (+1.9%), business services (+1.8%) and social services (+1.2%). In the industrial sector, an inverse relation was revealed between firm size and their capacity for creating new jobs. In comparison with employment growth rates of 2.5% forecasted for very small firms (with less than nine persons in employment), employment losses of 0.9% are forecast for large firms (with more than 200 employees). In line with this distribution of employment growth by firm size, the analysis of employment by occupation shows that while blue-collar workers will experience significant growth (+0.8%), the number of managing directors (required mainly by large firms) might actually decline. This trend is particularly evident in industry. Services, on the other hand, will enjoy a general increase of employment, with a trend towards the top of the employment structure in respect of occupational level. Employment growth will benefit retail traders, employees in the catering services and in the administrative and organisational functions in particular. Among skilled workers, an important role is played by metal workers and by plant and machinery operators. Very important is also the employment contribution of the social services professions. The educational qualification preferred by firms are the diplomas of financial, technical and computer specialists. The university degrees most heavily in demand are those in economics and in electrical engineering.

Regional trends

A prominent characteristic of the Italian economy and labour market is the large and increasing regional disparity: in 1996, the average unemployment rate was 6.6% for the northern regions, whereas it peaked at 21.7% in the South. The slight improvement forecast for Italian GDP and employment in the coming years will not be sufficient to bridge the regional divide. On the contrary, Prometeia's regional forecasts of March 1997 suggest a progressive widening of the gap as far as aggregate demand variables are concerned. Demographic trends could also contribute to maintaining the high unemployment rate in southern Italy under the otherwise prevailing conditions (such as productivity rates and inland migratory flows). As a matter of fact, population projections suggest that we will witness a progressive redistribution of the population towards the South given the higher fertility rates in southern regions (a fertility rate of 1.47 in the South compared to 1.04 in the North on 1994 data). This process will affect

2 In 1996, part-time employment represented only 6.6% of total employment and fixed-term contracts 5.3%. On the other hand, recent national accounts estimate that about 15% of Italian residents' employment relations are either non-regular or non-declared. In addition, about 700,000 jobs are held by unregistered immigrants.

the working population in a more marked way, given that in 1996 18.8% of the population of southern Italy was aged under 15, compared to only 12.6% in the rest of Italy.

Even among the northern regions, developments will be far from homogeneous evolution. According to Prometeia forecasts, the north-east, after years of fast growth rates of both GDP and employment, will undergo economic restructuring and a marginal reduction of employment in the coming years. Different, and more realistic, are the Excelsior survey results that point out some good performances for the north-east areas for the next two years (+1.7% employment growth), while the north-western regions appear less promising, above all where there is a bigger concentration of large firms.

Suggestions for policy responses

Forecasted labour market trends show a continuation of the structural problems of the Italian labour market, in particular its regional dualism and the difficulty of reducing the unemployment rate through the creation of regular employment.

There is thus an urgent need for a sound development policy for southern Italy and for policies to reduce irregular work as a share of total employment by altering the structure of comparative advantage between regular and illegal/irregular activities. Most of these issues are under debate in Italy and some steps have been taken (see, for example, the recent regulation on "emersion contracts", in order to support the emersion of irregular work, the deregulation of fixed-term contracts and the incentives to work part time).

Some positive elements are, however, emerging from most forecasts: the reduced growth of labour supply due to demographic trends and the recent increase in the employment/GDP elasticity probably linked, among other things, to the increased flexibility of the Italian labour market. The continuing important role of small and medium-sized firms in creating employment is also underlined. Such positive elements should be accompanied by appropriate policies.

Demographic trends, with the sharp increase in the old-age population and the decline of the working-age one, are pressing for a rapid revision of the Italian social security and welfare systems. There is currently a debate under way in Italy concerning a reform of the welfare system, and these issues are on the government agenda for 1997. Current proposals are calling for a revision of the pension system (mainly by prolonging working age and restricting early retirement, by changing from a wage-related to a contribution-related system and by reducing current disparities among categories of workers), of income-support policies (for example, by revising the entire system of unemployment benefits) and for the activation of policies supporting labour market participation and labour mobility.

Policy reforms are also required in the area of education and training. Such intervention is particularly necessary considering the role of small and medium-sized enterprises in fostering employment growth and the increased role of atypical jobs and labour flexibility on the Italian labour market.

The forecasted increase in female participation rates demands a revision of Italian social policies aimed at families and renewed attention for equal opportunity actions.

Finally, a remark should be made concerning the lack of adequate labour market data in Italy, which up to now has limited the calculation of detailed and complete estimates of future trends, especially at the local level. The increased attention given to labour market issues and the provision of new administrative data sets, together with the increasing role of local authorities in labour market policies, are creating new opportunities in this field.

Manuela Samek

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Luxembourg

Comment on forecasts

The Institute for Mathematical Sciences and Applied Economics (*Institut de Sciences Mathématiques et Economiques Appliquées* – ISMEA) attempted in 1996 to forecast labour market trends in the EU and its Member States up to 2015. The institute based its calculations on retrospective and projected time-series data on demography, employment and unemployment.

Apart from the calculations by ISMEA and the Eurostat projections, which cover all the Member States of the EU, there are no *national* medium- or long-term forecasts for Luxembourg. The only existing national report which contains short-term projections was produced by the Central Service for Statistics and Economic Studies (*Service Central de la Statistique et des Etudes Economiques* – STATEC). In its last annual report on the Luxembourg economy (published in June 1997), STATEC describes the development of and the perspectives for the economic situation between 1996 and 1998.

Description and discussion of major trends

Ageing of the (active) population

The Eurostat prognosis indicates that the total population will age until 2050: those younger than 40 decrease from 55% to 46% of the total population, while the oldest generation (80+) increases from 3% to 9% (cf. Table 1). The proportion of those aged over 60 to those aged 20 or younger continues to rise, from 76% to 132%. The ageing within the old age group (which is determined by the proportion of 80+ to 60+) increases from 20% to 41%. The "dependency coefficient" (which compares the 60+ and -20 with the working-age population) increases from 79% to 104%.

Expansion of dependent employment to slow in the short run

The expansion of dependent employment has slowed down progressively since 1990, declining from a growth rate in excess of 4% to 2.8% in 1996. In 1997 and 1998, this process will continue, with growth rates of 2% and 2.5%. At the same time, the proportion of part-time workers will rise.

The relative importance of employment in the industrial sector will decline owing to large-scale redundancies in the steel industry. This subsector has stagnated since 1990, after a period of significant growth between 1985 and 1990, at an annual growth rate of 2.2%.

The bank sector will recruit more slowly because of the reorganisation which seems inevitable in the run-up to the introduction of the euro. In the sector of other marketable services, job creation remains substantial. Since 1990, 20,000 jobs have been created in this sector, about 50% of which have been occupied by foreign workers (cross-border migrants).

The increase in the sector of non-marketable services will also slow down, but will still achieve a growth rate of 2%.

Higher unemployment rate in the short run

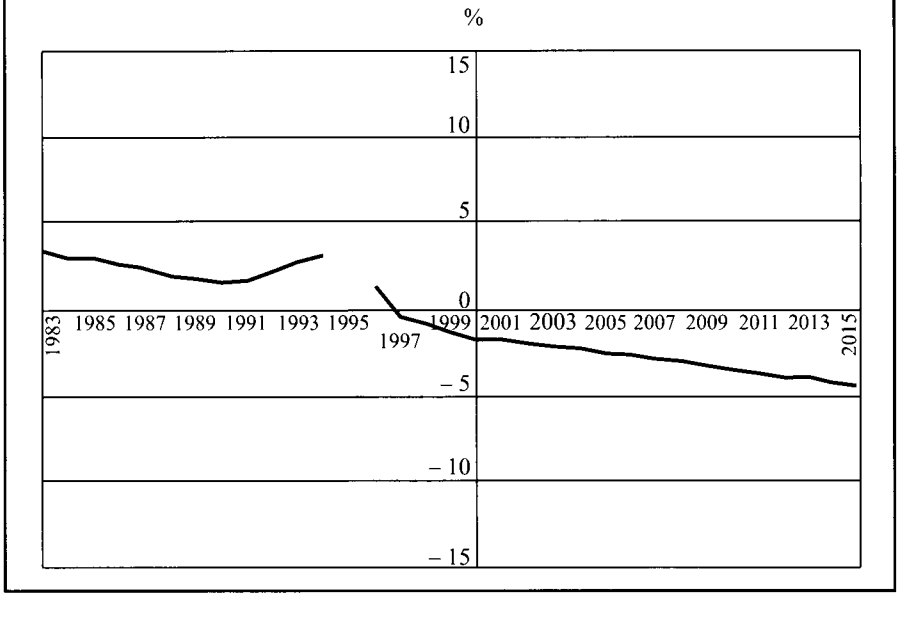
As the growth of employment slows down (with the exception of the mar-

Table 1: Projection of population by age group (in %)

	2000	2010	2020	2050
0–19 years	25.1	24.5	22.2	21.7
20–39 years	29.5	25.5	25.7	24.5
40–59 years	26.3	29.1	27.3	25.0
60–79 years	16.0	26.8	19.8	20.2
80 years and older	3.2	4.0	5.0	8.5
Total	100.0	100.0	100.0	100.0
	(435,000)	(471,000)	(501,000)	(563,000)

Source: Eurostat.

Figure 1: Unemployment rates from 1983 to 2015



ketable services sector, but not banking), the unemployment rate will rise slightly, from 3.1% in 1996 to 3.5% in 1998. However, this remains far below the 10% or more in the other European Member States.

For long-term projections concerning unemployment rates, we rely on the data provided by ISMEA. Whereas the demographic projections of the active population made by ISMEA (cf. Figure 2) are very reliable, the unemployment forecast relies on prognoses of both the activity rate and employment. As far as the latter is concerned, the basic scenario of DGII has been chosen. This one predicts a growth of employment of 0.7% for all the countries of the EU taken together. The growth of employment for Luxembourg is also calculated at 0.7%. The main purpose in the analysis of ISMEA consists in bringing forward indicative tendencies in the future. It is in the light of this that the projections that result in a negative unemployment rate – which would happen in approximatively 50% of the 150 European regions in 2015 – have to be understood. These negative unemployment rates do not have to be interpreted as absolute numbers, as they are only intended to show the relative importance of the changes in comparison with the (positive) rates of other years. As is shown in Figure 1, the unemployment rate in Luxembourg will decline (to –5% in 2015).

Feminisation of the labour market in the long run

According to the projections made by ISMEA, the female activity rate will increase from 48% in 1997 to 56% in 2015, whereas the male activity rate will decline from 76% to 65%. This is illustrated in Figure 2.

An increase in part-time work

When we look at the development of part-time work over the last ten years (cf. Table 2), we see that the proportion of female workers working part time has risen from 16.1% in 1985 to 20.3% in 1995. Together with the prediction of a further feminisation of the labour market, we can forecast a clear rise in part-time work in the coming years.

Conclusion

In the *short run*, the most important change consists in the slowing down of the growth of dependent employment. Because of the rise of part-time work, the implications for unemployment rates are limited; however, it should also be mentioned that a considerable number of new jobs are projected to be occupied by foreign workers, who already constitute 29% of the active population. Thus, the number of "frontaliers" can be expected to grow further as a consequence of the severe domestic labour shortage.

In the *long run*, the two most important trends are the ageing and the feminisation of the labour market. In order to retain older workers in the labour market for longer, the Luxembourg government is currently working out the framework for partial early retirement schemes. This will enable older workers who want to work less hours to remain in the labour market, instead of leaving them no other choice but full early retirement.

In order to stimulate the participation of women in the labour market, several measures are planned in the near future, such as:

- specific training programmes for women who wish to re-enter the labour market, with the emphasis on practical courses;
- the creation of a ministery to promote female labour;
- the setting up of a committee on female labour in which government, and workers' and employers' organisations are represented and which will issue recommendations or ways to stimulate female participation in the labour market.

Jan Denys & Peter Simoens

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STATEC: *L'économie luxembourgeoise en 1996.* Note de conjuncture.

Figure 2: Activity rates by gender

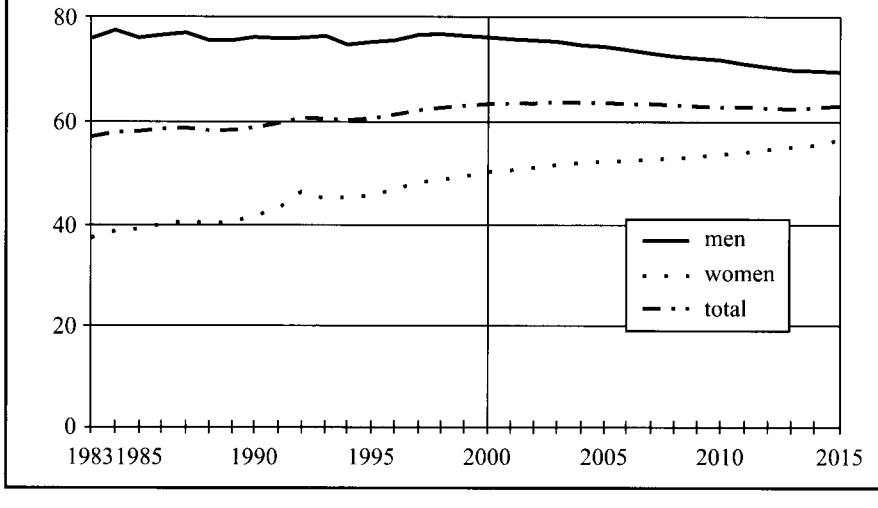

Table 2: Proportion of employees working part time (in %)

	1985	1990	1995
Men	2.5	1.8	1.1
Women	16.1	16.6	20.3
Total	7.1	6.9	7.9

Source: Eurostat: Labour Force Survey.

Netherlands

Introduction

Prospects for the unemployed in the Netherlands are slowly improving. Labour supply and demand are gradually converging, at least in purely quantitative terms. A more qualitative analysis reveals, however, that the fruits of economic development will not automatically be equally shared and enjoyed by all segments of the population.

This article outlines the quantitative and qualitative trends emerging from some recently published forecasts. A brief description of the institutional structure of labour market forecasting in the Netherlands precedes this outline. The article concludes with an exploration of the policy implications that can be inferred from these trends.

The institutional structure of Dutch labour market forecasting

Twice a year, the Dutch Central Planning Bureau (CPB) publishes an economic outlook for the Netherlands which contains labour market forecasts. Other institutions, like EIM Small Business Research and Consultancy (EIM) and the Nijenrode Forum for Economic Research (NYFER), also publish very short-term forecasts on a regular basis.

Labour market *trends*, however, unfold in the medium and long term only, and such forecasts are usually made much less frequently. CPB and EIM are the main institutions involved in medium-term forecasting on the Dutch economy. Usually, these forecasts take the form of scenarios. Often they are built up stepwise:

- first, an analysis at the macro- and mesoeconomic level;
- subsequently, in-depth studies of specific aspects, often carried out by specialised research institutes.

Long-term scenarios of labour market development in the Netherlands have been developed in cooperation between the CPB and the Dutch central statistical office (CBS). Within this project, three scenarios for population and labour supply up to 2020 have so far been elaborated.

Future labour supply and demand

It is expected that employment growth will exceed the growth of the labour force during the period 1997 to 2004.

The degree to which this will happen depends on the scenario for the *supply of labour*. The three scenarios mentioned above each sketch a different vision of economic and sociocultural developments in the next 25 years.

Table 1 shows the development of the labour force according to the three scenarios for the short and medium term. It is expected that the population of working age will increase from 9.6 million in 1995 to between 9.9 million (DE scenario) and 10.1 million (EC scenario) in 2005.

For the development of *labour demand*, only one recent scenario is available for the Netherlands. This scenario extrapolates past trends, taking into account foreseeable developments in world trade, inflation, etc. The business cycle is not considered. Table 2 presents the forecast for employment growth in the short to medium term. Employment growth will be somewhat higher for the self-employed than for employees.

To conclude this section, Table 3 compares the scenarios for the development of *labour supply and demand*. All in all, it is expected that unemployment will decrease gradually: by some 2% of the labour force between 1997 and 2003, according to the EIM scenario. These conclusions are in line with the expectations expressed in an oft-quoted report by the Scientific Council for Government Policy (WRR) on the dichotomy in society. The Council expects that the gap between employment and labour supply will diminish and even "turn around" in the period until 2015. According to the Council, the unemployment rate will start decreasing in the year 2000, and this may even lead to labour supply constraints later on.

A closer analysis of the trends

The overall developments described above apply by no means evenly across all segments of the population and the economy.

Labour supply forecasts predict an ageing work force. The labour market

Population and labour supply: three scenarios (CBS and CPB)

- Divided Europe (DE). This scenario assumes a stagnation of European integration. As a result, socioeconomic problems are not adequately dealt with and economic development lags behind that of the USA and Asia;
- Global Competition (GC): Dynamic technological development, strong internationalisation, individualisation and an important role for market mechanisms are emphasised in this scenario. At the same time, the welfare state becomes more frugal;
- European Coordination (EC): policy coordination is the central element in this scenario. Solidarity and social cohesion are considered important. Further integration occurs within Europe, on the basis of "a two-speed Europe". Globally, a certain degree of isolationism exists between the power blocks.

Source: Centraal Bureau voor de Statistiek (CBS) and Centraal Planbureau (CPB), 1997.

Table 1: Forecast growth of the labour force (20–64 years), 1995–2005 (in %)

Scenario	1995–2000	2000–2005
DE scenario	5	2
GC scenario	6	5
EC scenario	6	5

Source: Centraal Bureau voor de Statistiek (CBS) & Centraal Planbureau (CPB), 1997.

Table 2: Expected growth of employment in labour years and number of persons, 1997–2003 (in %)

	Labour years	Persons
Entire period	11.4	15.2
Annual average	1.6	2.0

Source: van der Hauw et al. (1997).

Table 3: Expected growth of the labour force and employment, 1997–2003

	Average annual change in %
Labour force	
– DE scenario	0.7
– GC scenario	1.1
– EC scenario	1.1
Employment	
– in labour years	1.6
– in persons	2.0
Unemployment change in % of the labour force	–0.3

Source: van der Hauw et al. (1997).

participation of women is expected to increase further. The labour market participation of migrants will continue to be relatively low.

As for labour demand, the fastest employment growth is expected in services. Whereas smaller enterprises were the main source of job creation during the recession, large enterprises are now catching up. People will spend less time at work: weekly working hours in full-time jobs will decrease, while the number of part-time jobs will increase. Broadly, the over-supply of relatively low-skilled labour will continue, whereas companies will face labour shortages with respect to a number of generally high-level qualifications.

These trends are described in more detail in this section.

Labour demand: a moderately favourable scenario (EIM)

The most recent medium-term labour market outlook (1997–2003) for the Netherlands was published by EIM Small Business Research and Consultancy in May this year. It is based on somewhat optimistic assumptions – although consistent with recent economic developments – with respect to the international environment. A macroeconomic scenario was constructed focusing on the development of employment by industry and enterprise size-class. In this scenario, export growth is the driving force behind economic growth. Investment develops favourably, as does private consumption, as a result of the confidence of entrepreneurs and consumers with regard to economic development. Inflation rates are relatively low. To a large extent, this is the result of moderate wage growth. In fact, wages grow by less than the sum of inflation and labour productivity (the "polder" model), which to a large extent explains why employment develops favourably.

Source: van der Hauw et al. (1997).

An ageing work force

As the average age of the population continues to rise, demographic pressure, defined as the ratio of young people and older people to persons aged between 20 and 64, will increase. If participation rates remain constant, this implies an increase in the ratio between inactive and active people. The financial implications of this development are obvious: relatively fewer people will have to bear the costs of education for the young and of pensions and medical facilities for the elderly. An increase in participation rates (especially of older people) might compensate for this. Whether such a compensation will occur depends on the scenario envisaged. The participation rate of men will only increase in the scenarios with relatively high economic growth. More pensioners will also perform paid work in this scenario, though their number remains limited. But only in one of the scenarios (Global Competition) does almost full compensation occur.

The average age of the labour force will also increase. The share of those over 55 doubles or even triples between 1995 and 2020 in all three scenarios. The largest increase occurs between 1995 and 2010.

Specific efforts are needed to keep older workers involved in the labour market. The skills and aptitudes of older workers are in danger of becoming outdated. This trend is being reinforced by today's rapid technological developments. This means that older workers will often be less productive, weakening their position in companies and on the labour market.

Previously, older workers often left the labour market "silently", taking an occupational disability pension. They now increasingly end up claiming unemployment benefits, because recently the criteria for disability benefits were tightened. When presenting the 1997 Central Economic Plan to the press, the Director of the CPB expressed his fear that unemployment benefits were replacing disability benefits as an "exit" route for older workers.

Increasing participation of women

In the Netherlands, the labour market participation of women has traditionally been rather low. It has increased substantially since 1985, although in recent years this trend has virtuallly come to a standstill. Increasing participation, for all workers, is predominantly the result of higher educational levels. Participation by well-educated women, however, is still less than that of educated men. Increasing labour market participation is also clearly correlated to the growing number of part-time jobs.

In the CBS/CPB labour supply scenarios, it is expected that in the future the labour market participation of women will continue to increase to levels comparable to those in Sweden and the USA.

Working time and part-time work

In 1995, an average of 1.089 persons were equivalent to a full-time job. In 1973, the same ratio was 1.043, showing a general tendency towards more part-time labour. It is expected that this trend will continue. Average working time is now about 35 hours a week; it is expected that this will decrease to 32 or 31 hours a week in 2020 (CPB 1997).

The number of "flexible" workers is also still increasing: in 1996, half of total employment growth (100,000) consisted of flexible workers under contracts. Flexible workers are those with a flexible number of working hours or employees with a fixed-term contract for less than one year (CBS 1997).

Shortages of high-skilled labour

The labour supply scenario includes a detailed analysis of qualifications and professions for which labour shortages and surpluses may arise. This analysis is difficult to summarise; therefore, only some very general or particularly marked trends are mentioned here.

A general trend seems to be that labour shortages are expected to occur more often in professions requiring higher qualifications. No shortages are expected for workers with lower-level technical education. In fact, a supply surplus is expected for several types of education, in particular, for example, for bakers or cooks and related training, as well as for sales and trade qualifications. For higher vocational education and for people with a university degree, it is expected that the demand for labour will exceed the supply in most cases (i.e. for most types of education).

Gap of participation rates of migrants to rise

According to the labour supply scenarios, the labour market participation of migrants is expected to increase. However, due to the continuous inflow of low-skilled migrant workers, who have low participation rates, the increase will be less than for the population as a whole.

Employment growth in service industries

In the EIM labour demand scenario, the fastest employment growth takes place in the services industries: hotel and catering, business and financial services, car and repair companies, and other market services (including the cleaning industry). Wholesale and retail trade and transport and communications take up a middle position. Manufacturing employment growth will be moderate. The smallest employment growth will occur in agriculture, mining and quarrying, and gas, water and electricity. These differences reflect the gradual transition towards a knowledge-based service economy.

Large companies on the rebound

As regards the size of the firms, it should be noted that in the recent past, employment growth in the Netherlands has been concentrated in enterprises employing less than 100 employees. From 1997 to 2003, however, the difference between employment growth in SMEs and large companies will be rather small. Thus, there seems to be a trend reversal under way as regards the enterprise-size-category pattern of employment growth. According to the Fourth Annual Report of the European Observatory for SMEs, large companies were the first to show signs of employment recovery in 1994/95 in the EU, and experienced the fastest employment growth during the period 1993–97. Nonetheless, in the non-primary private sector small firms are still predominant and the largest provider of employment. An interesting theme for further study is the question whether the difficult to place will find work more easily in small or in large companies.

Policy implications

The forecasts for the Dutch economy are positive. The economic growth required for these forecasts to prove correct is now a central issue in the programmes of the political parties for the next election. An important issue here is the trade-off between economic growth, on the one hand, and protection of the environment, on the other.

The other most obvious and most powerful trend is without doubt the ageing of the population. This has implications, in particular, for the position of older workers. Specific policies for older workers have already become a controversial topic in the Netherlands, where the idea of paying lower wages to older employees is unpopular. According to a survey published by the FNV Industry Union in January this year, only 8% of the population agrees that older workers should earn less because they perform less. Almost a quarter believes that older workers who actually perform less should be paid less. Over 70% feel that the work performance of older and younger workers does not differ significantly. Pleas for better training and working-time reduction for workers over 50 in order to prevent them leaving the labour market were received more favourably.

Since fewer workers will have to support a larger group of "inactive"

people, a downward pressure is being exerted on social security rights and an upward pressure on social security contributions. It is unlikely that the national basic old-age pension will remain in its present form. Proposals for basing it on income or means-testing it have already been made, but opposition against them was fierce. Supplementary old-age pensions often take the form of occupational pensions. The replacement of the traditional "last-wage system" by an average-wage system (as a basis for calculating pensions) in these schemes has already occurred in some sectors. Early retirement schemes can also be expected to be reduced considerably.

At the same time, money must be made available more than ever to those groups that will not profit from job creation without additional support, notably migrant workers and the long-term unemployed. Intensive counselling and guidance, although expensive, seem to be a precondition for such a move, combined with training and other measures. This implies that the trend towards cutting the budget of the employment service would need to be reversed. Simultaneously, innovative approaches involving other actors on the labour market should be supported. Another group causing concern in the Netherlands are the (partly) disabled. Their reintegration into the labour market is proceeding far more slowly than expected and needed.

Equalisation of the labour market participation of men and women requires further investment in childcare facilities. And, finally, education and training continue to gain importance. A reform of the vocational education system is taking place which, amongst other things, aims to anticipate the changing requirements of the labour market.

Marjolein Peters & Ton Kwaak

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Austria

The research situation

Prognoses of employment and labour market trends in Austria are made within the framework of the general economic prognoses of the *Österreichisches Institut für Wirtschaftsforschung* (Austrian Institute for Economic Research – WIFO) and also by the *Institut für Höhere Studien* (Institute for Higher Studies – IHS). Alongside the current annual prognoses, medium-term forecasts are also carried out with a five-year time horizon. Within these economic prognoses, labour market data are only available at a high level of aggregation, that is, generally only unemployment and employment figures.

A more highly differentiated prognosis, dealing specifically with the labour market and taking the form of a preview of the coming year and a medium-term scenario for the year 2000, is produced annually at the behest of the Austrian Labour Market Service (LMS) by the WIFO, in collaboration with the Synthesis research company. This labour market preview is the central instrument used by the LMS to evaluate future labour market trends.

Specifically with regard to the situation of apprentices and skilled blue-collar workers on the labour market, the LMS also conducts short-term (for the years 1997/98) and medium-term (for the year 2010) prognoses of the demand for and supply of apprentices, and evaluations of new entries of skilled blue-collar workers for the period 1997 to 2012 (AMS 1997).

In order better to be able to forecast skill-specific dimensions of labour demand, the LMS is currently developing a regional skill-requirement analysis (Glaubitsch et al. 1997).

The "Austrian Conference on Regional Development" *(Österreichische Raumordnungskonferenz* – ÖROK) issues reports containing model calculation forecasts on overall population trends, participation rates and labour supply scenarios to the year 2021 (ÖROK 1996).

Prognoses that attempt to analyse changes in substantive and institu-

tional labour market structures by interpreting existing quantitative data, and on this basis to forecast longer-term trends, are all but non-existent in Austria.

Forecast findings: the most important labour market trends

Economic parameters

The macroeconomic situation facing Austria in the mid-1990s is dominated by the need for structural adjustment in the wake of a far-reaching trend towards globalisation, fiscal consolidation measures aimed at meeting the Maastricht criteria, and the opening up of previously protected sectors to competition. This rigorous structural change has been associated with a phase of weaker economic growth; from 1998, however, the economic research institutes expect the economy to pick up significantly. According to the WIFO prognosis, in real terms, GDP could increase by just 1.8% between 1995 and 2000, thus lagging somewhat behind average growth in the EU (2.1%). The IHS forecast, however, is for annual growth of 2.1%, i.e. equal to the EU average.

Labour supply trends

The demographic prognosis (ÖROK 1996) suggests only marginal growth in the working-age population (15–59 year-olds) in the coming years; from 2006, a contraction is thought likely. Two scenarios were developed for forecasting labour supply based on this demographic trend: under the first variant, which assumes constant participation rates (base: 1991), between 1996 and 2006 labour supply increases by around 56,000 (1.5%) to 3.72 million. From 2006, labour supply declines until 2021 (–6.0%), falling even faster in the decade between 2021 and 2031 (by 320,000 or 9.1%). The second variant assumes that the trends observed in participation rates since 1981 continue: increase in female participation rates to the year 2001 and decline in the participation rates of men and women aged over 55. In this scenario, the supply trend is considerably stronger. For the period 1996 to 2006, an increase in the supply of labour amounting to almost 140,000 (3.8%) is expected; from 2006, however, labour supply begins to decline significantly in this scenario. The expansion of labour supply will be reflected in a marked increase in unemployment among youth, new labour market entrants and older workers made redundant.

In the variant selected by Synthesis/WIFO, the supply of labour rises by 0.4% between 1995 and 2000, an increase accounted for almost entirely by the rising number of gainfully employed women. It is assumed that the reform of pension regulations and the integration of the dependents of non-EU residents will have the effect of increasing labour supply only after the year 2000. For example, around 60,000 potentially job-seeking non-nationals are currently resident in Austria, but are denied access to the labour market through institutional restrictions. Given the difficult overall labour market situation, no change in the corresponding laws is to be expected at present. The only conceivable path to labour market integration would be via self-employment, but this is contingent on legal changes, though.

In this context, the institutes emphasise the fact that their models are subject to considerable uncertainty, not least due to the possibility of changes in the policies on foreign labour. This implies a greater degree of variance and thus some uncertainty regarding the prognosis of labour supply and unemployment.

Irrespective of the variant chosen, it is clear that the phase of surging labour supply is almost certainly over. Labour supply growth at a level characteristic of past decades will not occur in future. It is to be noted, however, that changes in pension laws will lead to a rise in the short term, particularly amongst the older age categories, whereby it cannot yet be determined precisely when this quantitative effect will manifest itself.

Labour demand – employment prospects

The number of persons in waged/salaried employment will decline between 1995 and 2000 by 0.1%. This figure conceals very different developments at sectoral level, however. In goods production, the level of employment is expected to contract by 35,000 (–5.4%). Particularly hard hit are the clothing industry and food, drink and tobacco. The decline in the construction and allied trade sector is put at 6.0%. The pressure for rationalisation and productivity growth in the secondary sector leads to a loss of employment here that will continue in the future. At the same time, the necessity for rationalisation and flexibilisation will lead to changes in corporate organisation and rising demand for upstream and downstream producer services (development, project management, legal and business consultancy, marketing, customer service, etc.); increasingly, these will be contracted out to external service firms. This is evident from the preview of employment trends in the service sector: between 1995 and 2000 the growth of service-sector jobs amounts to 81,000 (4.0%), 40,800 of them in the public and 40,200 in the private sector. Yet the service sector, too, will experience varying trends. A number of branches will face tough competition. These include transport and communications, banking and credit, and the trade sector, where employment is expected to rise slightly.

Views differ on the extent to which the loss of jobs in the secondary sector will be offset by rising employment in services. WIFO/Synthesis takes the view that in the coming years job losses in goods production will be made good merely by the growth of producer services, whereas other institutions consider that the now weak growth of the tertiary sector means that even now job losses are not being fully compensated for (Institut für Trendanalysen und Krisenforschung 1996).

The restructuring trends between and within the various sectors of the economy sketched above will have an

impact on skill requirements. In both goods production and services, skill requirements will rise, whereas demand for low-skilled labour will continually decline. This trend is also evident from the forecast for skill-specific labour demand, which is based on enterprise surveys: it predicts a sharp fall in labour demand particularly for those with only compulsory school education.

The most promising areas of activity are seen in environmental technology, biotechnology, health, education/advisory services and information/communication technologies, whereby the hopes placed in the last-mentioned sector, in particular, are considered over-optimistic by some authors (Leo 1997).

Apprentices and skilled blue-collar workers

For many years, the dual system of vocational training was accorded a central role in ensuring a smooth transition from the education/training system to the employment system. Since the mid-1990s, however, a significant contraction on the apprenticeship market has emerged: whereas in 1994 44.4% of 15 year-olds began an apprenticeship, the 1995 figure was just 40.9%. This is primarily due to the decline in demand for apprentices. According to the longer-term prognosis, there will be a further decline in the proportion of young people starting an apprenticeship up to the turn of the century: only one-third of each group of school-leavers with compulsory education will commence dual training. This means that, faced with the lack of training opportunities, a growing proportion of young people will attend further vocational training schools or will enter the labour market directly, mostly as unskilled labourers.

The apprenticeship trend also indicates that the steady decline in the number of blue-collar workers entering the labour market will reach its lowest point at 27,800 in the year 2005. These trends suggest that firms' need for skilled labour will no longer be covered solely by the system of initial vocational training.

Unemployment trends

Irrespective of the uncertainties surrounding specific employment trends, it is clear that, given the slight rise in labour supply, the level of unemployment in the coming years is likely to stabilise at a high level for Austrian standards. Annual average registered unemployment will remain above the values recorded at the start of the 1990s (1990: 168,000) throughout the entire period 1996–2000.

In the current labour market preview, a rise in the average number of registered unemployed of 24,000 (11%) is expected between 1995 and 2000. It is forecast that unemployment will increase until 1997, declining once more in the phase 1998–2000, following the onset of economic recovery. This implies a rise in the unemployment rate (according to Austrian definitions) from 6.6% in 1995 to 7.2% in 2000. This means that around 240,000 people would be unemployed in the year 2000.

The structure of unemployment remains similar to that of 1995. Men will increase as a proportion of registered unemployment by 1.1 percentage points to 56.4%. The trend towards a higher incidence of unemployment amongst the elderly will continue. Unemployment among 50–54 year-olds will increase by around 6% per annum. Foreigners will also suffer rapidly rising unemployment (5.4% per annum).

The unemployment trend will continue on a pattern observed back in the 1980s. The unemployment generated by a recession is only partially reduced during the cyclical upturn, so that the "platform" of entrenched unemployment increases from cycle to cycle. According to the WIFO prognosis, there is little chance of offsetting past job losses before the end of the millennium. The average duration of unemployment will increase and tougher competition will make it difficult, particularly for marginal groups, to gain access to the labour market.

No forecasts are available regarding the different forms of employment (full-time/part-time, atypical employment relations, etc.). It is merely assumed that a structural trend originating in the restructuring of production organisation, attempts at rationalisation in all areas and accelerated changes in the economy and labour market will occur, the effect of which will be to induce a move away from linear occupational biographies and "standard" employment relations. This implies both a flexibilisation of working time – overtime and time-off according to cyclical changes in demand – and also the replacement of standard employment relations with work on a project basis, job rotation and self-employment.

Table 1: Prognoses for the year 2000

	Minimal variant	Maximal variant
Labour supply[1]	3,636,802	3,668,200
– *change 1995–2000*	*–0.5%*	*+0.4%*
Wage- and salary-earners	3,058,108	3,065,400
– *change 1995–2000*	*–0.3%*	*–0.1%*
Total employment[2]	3,999,382	3,428,700
– *change 1995–2000*	*–1.2%*	*–0 3%*
Registered unemployment	237,420	239,500
– *change 1995–2000*	*+10.1%*	*+11.0%*
Unemployment rate	7.2%	7.2%
– *change 1995–2000*	*+0.6 % point*	*+0.6 % point*
Unemployment rate according to labour force concept	4.2%	4.2%
– *change 1995–2000*	*+0.3 % point*	*+0.3 % point*

1 Labour supply = wage- and salary-earners, self-employed, unemployed.
2 Total employment = wage- and salary-earners, self-employed.

Sources: Prognoses by OROK, IHS, WIFO, WIFO/Synthesis.

Conclusions: consequences for employment policy

The prognoses indicate that over the medium term a slight increase in labour supply is to be expected, although the precise extent cannot be predicted given the likelihood of policy measures in the areas of pension law and the employment of foreign workers. Given a simultaneous decline in the demand for labour, unemployment will rise.

This scenario points to the necessity for creating additional employment opportunities. The policy approach pursued so far, focusing on reducing the supply of labour, is coming up against its limits. Measures are currently being introduced to raise the effective age of retirement. This will lead to an increase in participation rates among the upper age categories, and thus an increase in labour supply. Not least in this context, supportive employment policy measures for the elderly will be required in order to counter unemployment prior to retirement age.

The forecasts for apprenticeship trends clearly underline the already acute labour market problem of the lack of opportunities for vocational training. In response, new measures must be developed and existing instruments intensified to help young people. In this context, changes in the mode of financing dual training are necessary, in order to make it more attractive for companies to create places for trainees.

The scenarios show that the economy's demand for skills can no longer be met by those leaving the initial training system, while at the same time the demand for labour without vocational training will continue to decline. Rising skill demands in the coming years and the increased necessity for continuous learning for those already in the labour market, against the background of ever-faster technical/organisational change, underline the necessity for a more offensive further-training policy.

Past trends and the medium-term forecast for self-employment show that it constitutes only a very limited employment option. A vital condition for any increase in self-employment is the liberalisation of professional market-access conditions and of the certification in case of business start-ups (*Gewerbeordnung* – Business Activities Law). In many cases, these are no longer in accordance with modern requirements. This may help some foreigners who are currently seeking employment, but are prevented by legal restrictions from entering the labour market as wage-earners, to earn their living through self-employment.

In addition to the measures just mentioned and an intensification of active labour market policy, new initiatives are also vital, particularly in the area of working-time redistribution, a topic that has only just begun to be discussed in Austria.

Ferdinand Lechner

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Portugal

Introduction: forecasting in Portugal

Anyone attempting to deal with the issue of employment and unemployment in Portugal faces the difficulty of the lack of documented analysis on the subject. In particular, although recent forecasts are available on demographic trends, the existing forecasts of education and demand-side aspects are neither up to date nor sufficiently disaggregated. The review of the existing material is nevertheless instructive since it facilitates identification of the major trends and the corresponding challenges for Portuguese society.

Two sources, in particular, must be mentioned: in 1995, they both presented scenarios on the evolution of the Portuguese economy including useful forecasts on employment and unemployment. The IED (Institute for Development Studies), an independent research institution, produced a report focused on employment (IED 1995) for DG V of the European Commission which elaborates five scenarios for the year 2000, each based on different assumptions concerning migration, GDP and productivity growth. The DPP (Department of Planning and Perspectives), a government agency, has produced a longer-term study (to the year 2015) dealing with the Portuguese economy as a whole and based on scenarios of the evolution of the world economy.

The main trends

Demographic forecasts

In spite of different assumptions concerning fertility, mortality and migration, the existing demographic forecasts coincide on the main features of the pattern of development of the Portuguese population:

a) *Slow growth or stagnation of the total population:* According to one source (Comissão do Livro Branco da Segurança Social 1977, based on studies by Eurostat), the total population (9,900,000 in 1995) will slowly grow by 682,000 to the year 2025 and decrease after this date. A second source (Cónim 1996) estimates that the maximum population will be reached in 2009 at 10,050,000, decreasing afterwards to 9,928,000 in 2024.

b) *Decline in the population under 15:* both sources agree on a relative decline of this age group from 18% of the total population in 1994/95 to about 15% around 2025; this also amounts to a reduction in absolute figures.

c) *Stagnation of the working-age population (15–65):* according to both sources, we should expect a relative reduction in this age group from 68% to 65% of the total population. This relative reduction amounts to a small absolute increase of 228,100 potentially active individuals up to the year 2025, according to the first source, and a decrease of 288,800, according to the second.

Unemployment growth and productivity

In the last few years, unemployment in Portugal has risen steadily from a comparatively low rate of 4.1% in 1992 to a more disturbing level of 7.3% in 1996. Experts have broadly agreed that these figures are an un-

Table 1: Recent unemployment rates in Portugal

	Unemployment rate (a) (%)	Total unemployment (b) (1,000)	Long-term unemployment as % of total unemployment (b)	Youth unemployment as % of total unemployment (b)
1992	4.1	186.9	26	40
1993	5.7	248.4	29	48
1994	7.0	312.2	34	33
1995	7.3	325.4	39	33
1996	7.3	332.3	42	33

Sources: (a) OCDE: Main Economic Indicators; (b) INE: Inquérito ao Emprego.

Table 2: Rate of unemployment

		Years	
Scenarios	2000	2007	2015
A1	6.5	7.6	6.4
B2	5.8	5.0	4.6
C3	5.5	5.0	4.2

Source: DPP scenarios.

Table 3: Rate of unemployment

Scenarios	Year 2000
A	7.1
B	13.9
C	13.0
D	9.0
E	15.7

Source: IED scenarios.

derestimation of the real present dimension of the problem. But even if the figures are underestimated, they indicate an unambiguous trend towards an exacerbation of the problem (see Table 1), explaining why unemployment is becoming a major concern in public opinion and a top priority of government policies.

Clear discrepancies are to be found in unemployment rate forecasts. Tables 2 and 3 present the figures given by the DPP (1995) and the IED (1995). In their most pessimistic scenarios, the DPP obtains an unemployment rate of 6.5% in the year 2000, compared to 15.7% in the case of the IED.

The ongoing debate on unemployment in Portugal and on the policies aimed at containing and reducing it is very often focused on the following question: should the recent growth of unemployment be viewed as linked with the recessive phase of the business cycle or as a combination of recession and more permanent structural changes? An argument in favour of the first alternative is the present decline in the growth of the unemployment rate, one which is associated with other signs of economic recovery. However, there are other reasons to believe that apart from a cyclical component of unemployment, i.e. one which can be reabsorbed during expansions, there is also a growing structural component.

From the forecasts presented above, it is clear that demographic factors in general will most probably not account for pressures on the supply side of labour markets (assuming a constant participation rate). Nevertheless, in the years to come the growth regime of the Portuguese economy will most likely be based on rising productivity. Competition on global markets will prevent the survival of labour-intensive, low-skill industrial production; low-productivity agricultural employment will continue to diminish; new employment in industry and services will be better qualified and more productive. If there is to be real convergence with the EU average, labour productivity will have to grow steadily in Portugal. All these factors point to a worsening of the situation of insufficient demand for labour in the near future.

Table 4: Employment by sector

	Average annual change of employment 1995–2015 (%)		
	Scenario A1	Scenario B2	Scenario B3
1. Agriculture, forestry and fishing	–3.0	–3.6	–3.7
2. Energy	0.2	0.9	0.7
3. Manufacturing	–1.0	–0.6	–0.8
4. Construction	0.2	0.5	0.9
5. Transport	0.1	0.3	0.0
6. Tradable services I[1]	1.5	2.0	2.7
7. Tradable services II[2]	0.9	1.4	2.1
8. Non-tradable services	0.0	0.1	0.1
Total	–0.1	0.2	0.4

1 Tradable services used by households.
2 Tradable services used by firms.

Source: DPP scenarios.

The DPP's forecasts on the unemployment rate presented above seem, therefore, to be over-optimistic. Unemployment rates well above 10% in the near future are not an unrealistic prospect. Ignoring or underestimating this threat will not help to avert it.

In the reviewed literature, the growth of long-term unemployment is interpreted as a sign that more and more individuals with low levels of education and vocational training are being excluded from the market. This trend, if projected to a future where the demand for high skills seems to be increasing, points to a scenario of a two-class society with a deep internal divide.

It must also be pointed out that the unemployment crisis has been associated with a decline in the quality of employment and the deregulation of the employment system. The underground economy has expanded, child labour and other unacceptable practices of exploitation have spread, especially in the construction sector and in some traditional industrial areas.

While these trends fully justify the concern of public opinion, policy action to promote employment may still avert the most pessimistic scenarios. The willingness to act expressed and the measures adopted by the national and European authorities must be taken into account and welcomed.

Employment by sector

The two sources are less at odds over the distribution of employment by economic sector. Both anticipate a large net destruction of employment in agriculture, forestry and fishing, a more moderate one in the manufacturing sector and a net creation of employment in services as a whole, with moderate or zero growth in the transport and construction sectors.

The forecasts on the demand-side aspects of the labour market are not sufficiently detailed. However, it is quite clear that labour demand is what we should look at more closely if we are to understand the origin of the present and future tensions in the employment system.

First of all, there is agreement that agriculture will continue to contract in employment terms and that it will no longer absorb temporary unemployment during recessions. It is indeed hard to believe that the high level of agricultural employment is sustainable in the longer term. The rural exodus can only be countered if the rural populations find alternative activities to supplement their income.

It is also clear that industry in Portugal is undergoing a rapid process of restructuring. This process occurs predominantly inside each industrial sector, with the replacement of old and inefficient units by new and more productive ones. At the same time, there has been a net creation of em-

Table 5: Education levels* of the population (in %)		
	1981	1991
Illiterate	26	17
Others without formal education	1	1
Primary – 4 years	48	44
Basic – 6 years	9	13
Secondary – 9 years	8	11
Complementary – 12 years	5	9
Higher education and vocational training	1	1
Polytechnic and university education	2	5
* Levels attended or concluded.		
Source: INE Censos 1981, 1991.		

ployment in the smaller units and destruction in the larger ones as a result of processes of outsourcing: departments and functions previously vertically integrated in large firms have been set up as small autonomous units. Both processes, the renewal of the corporate population and the proliferation of small units, have been and probably will continue to be associated with the growth of labour productivity.

The expansion of the service sector is also a trend identified by both forecasts, with the emphasis on personal services and services rendered to firms. Most of the jobs created in this sector will probably require a high level of qualification. According to one source (Instituto de Propectiva 1993), the increasing demand for labour with medium or high levels of education in the service sector will continue in the future.

Increasing levels of education and vocational training

In spite of the persistence of comparatively low education and training profiles, during the last decade there has been clear quantitative progress which, if projected into the future, will exceed the forecasts made during the 1980s (Carneiro 1988). In a forecast for university education (Instituto de Prospectiva), in the years 2004/05 the number of graduates will increase by 70% on the 1990 level.

Not only has the general level of education of the population increased (see Table 5), but a formal system of vocational training has been created, closing the gap between school and active life. The Portuguese work force will therefore enter the next century with levels of education and vocational training closer to the EU average.

In spite of the progress in education and training, it is uncertain whether the labour force is being sufficiently prepared to seize the opportunities of the future or create its own opportunities. Serious problems of quality have emerged in the education and vocational training systems during the rapid expansion of the last decade.

Policy responses to unemployment

The government's employment policy, as defined in the agreement signed with representatives of the employers and some of the trade unions in December 1996 (Conselho Economico e Social 1996), is based on the realisation that unemployment in Portugal has a strong structural component, apart from a cyclical one.

The key elements of this policy, as defined in the relevant document, can be summarised as follows:

- modernisation with job creation;
- industrial restructuring combined with professional qualification and social protection;
- focus on opportunities in certain labour–intensive sectors;
- encouragement of innovation and local employment;
- restructuring of the employment market;
- creation of new skills and the fight against social exclusion through education and training.

Action for employment is viewed as a global policy combining macroeconomic, industrial and regional development policies with active employment policies, training, education and social security.

The goals pursued and the means defined are the following:

- to restrain the destruction of employment in agriculture by diversifying activities in rural areas;
- to stabilise employment levels in industry, modernising the traditional sectors and developing a new pattern of specialisation (automobiles, electronics, etc.);
- to expand employment in the service sector (services rendered to firms, collective services, education, health, culture, personal and local services).

The importance of local initiatives leading to job creation is stressed. Already Regional Networks for Employment and Qualification linking firms, local authorities, schools and universities have been set up with this aim in mind.

Other measures related to the regulation of the labour market have also been adopted, namely the reduction of working time to a maximum of 40 hours a week, the reduction of overtime work, the extension of part-time work, and partial retirement.

The government's employment policy is based on a recognition of the structural nature of the current unemployment trends, and explicitly rejects two alternative views: that unemployment is due exclusively to rigidities in the labour market, and that it is due exclusively to recession and insufficient growth. The government's position seems to be correct. On the one hand, measures aimed at further flexibility would, at least in the Portuguese case, be not only socially unacceptable but also inefficient – studies based on empirical data have shown that real wages in Portugal are in fact flexible (Mendes

1997). On the other hand, the growth rates necessary to absorb unemployment would be unrealistically high given the present and foreseeable macroeconomic constraints.

However, the strategy is built upon the dubious assumption that the conflict between economic competitiveness and employment can be resolved without deep changes in the social institutions regulating the use of labour. This may not be the case.

While retaining the positive features of the agreement on employment policy reached between the government and the social partners, it seems necessary to widen the debate to encompass other considerations, while at the same time permanently reassessing the policies adopted in the light of their results:

a) Employment policies usually stress the need for job creation. However, the issue can also be dealt with from the perspective of labour supply. The activity rate in Portugal is one of the highest in Europe. Measures aimed at reducing it, such as increasing leave taken for child care or early retirement (although this conflicts with the present constraints on the funding of pensions), may have an equally important impact.
b) In the face of the combination of moderate rates of GDP and labour productivity growth, it is hard to imagine that measures aimed at job-sharing will not have to be carried out faster and to a greater extent (irrespective of the resistance that the modest reduction of the working week to 40 hours is presently raising).
c) According to the trends discussed above, the number of those threatened with exclusion from the labour market due to lack of qualifications will tend to increase in the future. The proposed measures aimed at this group of the population should therefore be implemented as a matter of priority, and new schemes for sheltered work based on the combination of vocational training and the production of goods and services for the market place in entities temporarily shielded from competitive pressures should be established.

Helena Lopes

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Finland

Compilation of long-term projections in Finland

Long-term projections of labour market developments involve demographic projections and, based upon them, scenarios of labour supply and demand. The time span is longest in demographic projections – extending as far as 2050 or 2100, whilst in labour market projections the time span is usually 15 to 35 years.

The main demographic projections are compiled by Statistics Finland. They have assumed the position of "official" forecasts, and the other labour market scenarios usually rely on them. The latest projection by Statistics Finland, published in summer 1995, covers the period 1997–2050. The underlying assumptions are approximate to the actual outcomes in recent years. In the baseline projection, the fertility rate remains at 1.75 over the whole period (1.82 in 1996). Mortality improves slightly, with life expectancy at birth rising on average by three years for men and two years for women between 1996 and 2010 and remaining constant thereafter. Life expectancy at birth then reaches 76.1 years for men and 82.4 years for women in 2010. Net immigration is expected to continue at low rates initially (less than during the past ten years on average), making an annual contribution of 3,000 people to the population growth till 2010, and ceasing totally thereafter. Each of these assumptions has been criticised on different grounds, and in alternative scenarios fertility rates

are either higher or lower, the rise in life expectancy continues for longer and net annual immigration increases rather than ceases.

Since the mid-1960s, labour market projections have been compiled by the employment service at intervals of three to five years. The latest long-term projection was published in January 1996. The report analyses trends in the demand and supply of labour until the year 2010, with some additional projections for 2010–2030. The report includes employment projections in sectoral, occupational and regional terms, as well as labour force projections by age and region.

No other long-term projections with a particular focus on labour market performance are regularly compiled in Finland. Yet in general economic scenarios, labour market developments certainly play a vital role, albeit at quite an aggregate level. Other quantitative long-term scenarios are produced only occasionally. Among them, the report by Olavi Rantala (1997) from the Research Institute of the Finnish Economy provides a recent example. To a greater extent than the other projections, this report is more rigorously based upon an econometric model. Assumptions concerning productivity and average working hours – developments by industries – for instance, are directly based on econometric results for the period 1962–1994.

Demographic trends

Demographic trends will drastically alter the basic conditions under which the labour market operates. During the post-war period, population growth has mainly been attributed to natural growth, that is, the excess of births over deaths. This excess is falling, however, and by the year 2013, the number of deaths is expected to exceed that of births. Moreover, the decline in the number of births from over 100,000 in the post-war baby-boom years (1946–49) to about 60,000 at present implies that the population is ageing. Since the early 1980s, net immigration has become positive and has significantly contributed to population growth in Finland.

According to the latest population projection by Statistics Finland, the population of working age (aged 15–64) will peak towards the end of the next decade, amounting to a total increase of 70,000 (2%) in ten years' time. Thereafter, the population of working age will start to fall and pass the present level again around 2012, when the baby-boom generation reaches retirement age. In 2020, the population aged 15–64 is predicted to be 94% of the present level, while the corresponding figures in 2030 and 2050 will be 88% and 79%, respectively.

The composition of the working-age population is closely linked to the potential renewal of the labour force. The younger age groups that are expected to replenish the labour force will represent a strikingly stable proportion of the population of working age. The shares of the 15–19 and 20–29 age groups in the working-age population will remain at around 9% and 18%, respectively, over the whole projection period 1996–2050. The oldest age group (55–64 years) will account for a progressively larger share up till 2010, but the share will stabilise thereafter at around 22%. From then on, it is the intermediate prime-aged group (30–54 years) – those with the highest labour force participation rate – whose share in the working-age population will fall from 56% in 1996 to 49% in 2010.

Labour force projections

The labour force participation rate – the ratio of the labour force to the population of working age – increases in economic upswings and decreases during recessions. Thus, any future projections are conditional upon economic developments and changes in social welfare policy. In the baseline labour force projection presented by the working group of the Ministry of Labour (1996), economic growth is assumed to average about 3% up till 2010, and a good 2% during 2010–2030. According to this scenario, the labour force will initially increase slightly – up 2% by 2005, but will decrease thereafter, mainly due to the decline in the population of working age. In 2010, the labour force will be broadly the same as in 1995, but will decrease by 9% during the period 2010–2030 (Table 1). The average labour force participation rate among those aged 15–64 fluctuates slightly around 72%. The ageing of the population tends to lower the average labour force participation rate. In many age brackets, however, particularly among young adults and older men, labour force participation rates are expected to rise.

An interesting perspective is provided by a comparison with developments in the potential labour supply (see Parkkinen 1997). The projections are based on the assumption that group-specific labour force participation rates (by five-year age brackets and gender) will be equal to their max-

Table 1: Projected developments in the labour force (1,000) by age and gender, 1995–2030

	1995	2010	2030	Change 1995–2030
Labour force	2,497	2,502	2,276	–221 (–9%)
By age				
15–29 years	546	577	525	–21 (–4%)
30–54 years	1,708	1,510	1,409	–299 (–18%)
55 years and older	243	415	342	+99 (+41%)
By age, in %				
15–29 years	21.9	23.1	23.1	
30–54 years	68.4	60.3	61.9	
55 years and older	9.7	16.6	15.0	
Women, in %	47.4	48.1	47.7	

Note: The definitions correspond to those of the old labour force survey valid till 1997.

Source: Ministry of Labour (1996).

imum values during the period 1983–1996. In 1995, the potential labour supply was about 9% higher than the actual one. The potential labour supply will increase slightly by the year 2000, but decline at an accelerating rate thereafter. Compared with the base year 1995, the potential labour supply will be about 14% lower in 2030, and the gap between the potential and actual labour supply will be reduced by 70%.

Due to the demographic trends, significant changes in the age structure of the total labour force are inevitable (Table 1). As with the population trends, the most marked changes will take place among the groups of prime-aged and older people by the year 2010, but their relative shares will stabilise thereafter. However, there will be virtually no changes in the relative shares of those under 30 and of females in the total labour force over the whole period 1995–2030. The distinctive feature of future developments will be the high proportion of the oldest age groups in the labour force, which will require new efforts to adjust working conditions, work organisation and training to the needs of older people.

Table 2: Projected employment developments (1,000) by sector, 1995–2030

	1995	2010	2030	Change	
				1995–2010	2010–2030
Total	2,068	2,300	2,204	+232	-96
Primary sector	158	122	96	-36	-26
Secondary sector	574	671	556	+97	-115
Tertiary sector	1,336	1,507	1,553	+171	+46
of which					
- public services	512	523	544	+11	+21
Breakdown by sector, %					
- primary sector	7.6	5.3	4.4		
- secondary sector	27.8	29.2	25.2		
- tertiary sector	64.6	65.6	70.4		
of which					
- public sector	24.8	22.7	24.7		

Source: Ministry of Labour (1996).

Table 3: Job openings by type of occupation, 1995–2010

Occupation	Net change in employment (1,000)	Natural wastage (1,000)	Job openings (1,000)	Job openings, % of employment in 1995
Total	+222	961	1,182	57
Knowledge work	+226	324	550	74
Service work	+47	285	333	52
Production work	-56	352	296	43

Source: Ministry of Labour (1996).

Main trends in employment and unemployment

The projections for employment in 1995–2030 are derived from productivity and output trends by industry and assumptions regarding a reduction in average working hours. Labour productivity growth (per hour worked) is expected to slow down in manufacturing and the primary sector, but to speed up in services, in both the private and the public sectors. Moreover, the average annual working hours are expected to decline by 5% over the period 1995–2010 and by 4% in 2010–2030.

Table 2 depicts the main employment trends by industry. A few remarks on sectoral changes in employment are worth making. Firstly, the secondary sector will revive in relative employment terms until 2005. This will be mainly due to the rapid output growth in manufacturing combined with fairly modest productivity growth in both manufacturing and construction. Secondly, the increase in the share of the tertiary sector will initially be very slow, even if there is quite a substantial growth in private services; this is due to the decline in the relative share of public services, where output is expected to decrease in the late 1990s.

These are the two points that differ from the scenario by Rantala (1997). In his model, the annual growth rate in public services amounts to almost 2% and the share of public services in total employment increases by 3 percentage points by 2010. Moreover, the growth of labour productivity markedly exceeds output growth in manufacturing, leading to a decline of 3.5 percentage points in the manufacturing share by 2010. The comparisons suggest the crucial significance of the assumptions made about labour productivity growth and about developments in public services. Since segregation by gender has proven to be highly persistent in the labour market, the various outcomes would be likely to affect women and men in different ways. No explicit projections of labour market trends by gender have been attempted as yet, however.

Occupational trends are quite closely related to sectoral change, even though in some occupations, as in the case of technical professionals, substantial growth has taken place within manufacturing, too. As the age structure of the current work force differs across occupations, there is some variation in the extent to which new employees will be needed to replace natural wastage in the future. In Table 3, net changes in occupational employment are added to estimates of natural wastage to arrive at the number of job openings by type of occupation.

This kind of analysis – which is more dynamic than usual – suggests that almost 1.2 million job openings will occur by 2010, most of them because new employees are needed to replace natural wastage. The demand

for labour will be highest in knowledge-intensive work, where the number of job openings will amount to three-quarters of the current work force. Combined with estimates of new graduates by 2010 and the current slump in the labour market, the analysis can be used to map out educational needs to fill the job openings. The report concludes that more educational resources should be devoted to training professionals and managers in production, business services and administration, and experts in telecommunications work. On the other hand, excessive supply of labour seems likely to persist in cultural work, sales, catering and the agricultural sector.

As regards employment relations, there are no quantitative projections available, even though a growing "precariousness" in terms of employment contracts is generally expected to characterise future developments. By international standards, fixed-term contracts have traditionally been quite common in Finland. Part-time work, whose share in total employment has been exceptionally low and stable, is also expected to increase somewhat, especially among older people.

Regional developments, too, are of particular interest in Finland, since the regional disparities in unemployment rates are large and persistent, with the sparsely populated eastern and northern parts of the country suffering the highest rates. During the deep recession, there was a temporary equalising tendency, but during the economic upswing regional disparities have started to widen again, and great concern has been expressed about this trend. Strikingly, the projection by the Ministry of Labour does not imply any marked worsening in regional disparities, at the level of five regions (NUTS2) in Finland, by the year 2010. Even though Uusimaa, the southernmost province in Finland, is the only region where the labour force is expected to expand, employment growth is – perhaps surprisingly – projected to take place fairly evenly across the regions.

In terms of unemployment performance, the baseline projection suggests that the unemployment rate will decline from a high of 17% in 1995 to 13% in 2000, 8% in 2010 and 3% in 2030. The relative position of older people is expected to deteriorate very rapidly given the slack labour market. Last year, a quarter of all unemployed persons were over 50 years of age, but in a few years' time they are expected to account for one half of the total (Committee Report 1996).

Major challenges and policy responses

The major challenges posed by the long-term scenarios are certainly related to the sharp increase in the share of older people in the population. Given the low labour force participation rate, particularly among men in their sixties, and the prospect of a rapid increase in pension expenditure, delaying retirement from the labour market has become an important policy goal. At present, the average retirement age is less than 59 years, and less than 10% of older people continue working right up to 65 years of age. According to the calculations made by the Central Pension Security Institute (see Korpela et al. 1997), raising the actual retirement age by three years would reduce pension expenditure in the long run by the same amount as by calculating the total fertility rate at a level corresponding to the natural renewal of the population.

In order to prolong working careers, a range of policy measures is available, including measures relating to pension provisions, and those affecting working abilities and other preconditions for gainful employment. Because the post-war baby-boom generation will approach the critical phase within the next ten years, several measures have been introduced both to make the conditions for early retirement less favourable and to encourage working beyond the age of 60. Moreover, as long-term unemployment is particularly severe among older people, special measures have been considered to get them back to work. Some of these, like the training allowance for long-term unemployed taking the initiative to undergo training, have already been implemented.

Perhaps the biggest challenge concerns the development of functional aspects of working conditions and work organisation to meet the needs of older people. The recent committee on "Ageing people in working life" proposed the implementation in 1997–2001 of the National Programme for Ageing Workers, an extensive plan focusing heavily on maintaining working abilities, improving qualifications and lowering the barriers to hiring ageing workers. In conditions of high unemployment, the employers' preference for younger people is hard to curb, however. Yet there seems to be substantial scope for adjusting the working conditions for older people in order to support their continuing employment. On reaching their fifties, a great number of employees feel that their capacity for work has deteriorated. Yet according to a study carried out at the Central Pension Security Institute (Gould et al. 1992), very few of them have changed tasks, working hours or job in order to better adjust to the impaired capacity for work, which may be taken as an indication of the rigidity of their working lives. Among those willing to retire, push factors related to unemployment, heavy work and impaired health appear to be much more important than pull factors. For those willing to retire, staying at work seems to require substantial economic incentives. Policy responses in terms of improving the situation of older workers at the workplace might prove a more viable and cost-effective way to promote the position of older people in the labour market.

Tuire Santamäki-Vuori

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Sweden

Forecasting in Sweden

The main domestic sources for labour market forecasts and scenarios in Sweden are:

1. the National Institute of Economic Research (NIER),
2. the Ministry of Finance, and
3. the National Labour Market Board.

In addition, there are economic forecasts produced by institutions such as banks and the social partners. Of course, all these forecasts and scenarios take into account the economic forecasts produced by international bodies to a certain extent, but the focus here is on the reports from the three main domestic sources. This article closes with a commentary on a recent study (including an annex in the form of an expert report) which analyses the impact on the labour market of Sweden joining or not joining the EMU.

Short-term forecasts

The short-term reports consist primarily of forecasts. The NIER and the Ministry of Finance publish short-term forecasts regularly; the National Labour Market Board publishes predictions twice a year. The latest forecasts (as of early October) are Ministry of Finance (1997), NIER (1997b) and National Labour Market Board (1997b). The latter forecast focuses on the development on the labour market from different points of view, while the others are general economic forecasts.

Medium- and long-term scenarios

None of the medium- or long-term reports should be interpreted literally as forecasts, but as scenarios. The term "scenario" as opposed to "forecast" is used deliberately: scenarios are used to picture a possible outcome on the basis of certain assumptions. At best, these scenarios elucidate the impact of certain fundamental factors on the economy. The NIER and the Ministry of Finance regularly produce general economic medium-term studies, while more labour-market-focused medium-term reports are occasionally published by the National Labour Market Board.

A section in the NIER report (1997a) provides a general economic scenario for the period 1998–2002. The Ministry of Finance (1997) devotes a chapter to a general economic scenario for the period 1998–2000.

The National Labour Market Board (1997a) presents four different labour market scenarios up to and including the year 2000. However, it does not state whether it considers any of these scenarios to be more realistic than another; they should be seen as possible alternative developments. The initial difference between the scenarios is that a different number of jobs are assumed to be created or destroyed.

The primary function of the *Medium-Term Surveys* (regularly published since 1948 at intervals of two or three years) is to provide an extensive foundation for future policy decisions. The latest report is *The 1995 Medium-Term Survey*; in spite of its title, the emphasis is in fact on the long-term perspective. The scenarios and proposals presented in the main report have two goals: enhanced economic growth and a greater degree of economic liberalism. Accordingly, the survey deals extensively with questions pertaining to the conditions for reducing unemployment and for structural improvements in public finance. The main report of the Survey is accompanied by 14 annexes[1] containing background material and supplementary information written by various experts. In the main report, one reference and two alternative scenarios are used. The reference scenario is based on historically reasonable assumptions regarding, for example, productivity, world market developments and labour force participation rates. The two alternative scenarios outline what might happen if Sweden either

1. fails to meet the requirements for recovery, or

1 Originally 15 annexes were planned. However, Annex 1 (entitled "Methods, models and calculations") was not in fact published.

Table 1: Comparison between short-term labour market forecasts, 1997–1998

		National Labour Market Board		NIER (1997b)		Ministry of Finance	
		Month of forecast					
		May 1997		August 1997		September 1997	
	1996	1997	1998	1997	1998	1997	1998
	In 1,000 of persons						
Labour force (16–64 years)	4,310	–35	–7	–30	4	–34	–8
Employed	3,963	–46	50	–48	40	–48	39
of which:							
– agriculture and forestry	115	–7	–8	–4	–3	–4	–2
– industry	809	–5	13	–11	12	–7	12
– construction	221	–7	10	–8	3	–6	5
– private service sector	1,515	11	28	17	24	–15	18
– public sector	1,300	–38	7	–41	3	–46	–6
	Percentage of labour force						
Registered unemployment	8.1	8.4	7.1	8.5	7.7	8.4	7.4
In labour market programmes	4.5	4.8	4.9	4.4	4.4	4.3	4.7

Sources: National Labour Market Board (1997b), NIER (1997b) and Ministry of Finance (1997).

2. experiences a stronger increase in employment as a result of structural measures undertaken.

The reference scenario and the two alternative scenarios cover the period 1994–2010.

Main forecasts and trends

The latest short-term reports (Ministry of Finance 1997; NIER 1997b; National Labour Market Board 1997b) paint rather similar pictures for the development up to and including 1998 (see Table 1).

Employment is expected to increase after the downturn in the labour market during 1996/97. Average working time is projected to be more or less unchanged, after having increased substantially during the 1990s. All (or almost all) of the employment increase is expected to occur in the private sector, especially in the private service sector, although industrial employment is also expected to rise by 1–1.5%. The number of employees in local government (the largest part of the public sector) will probably bottom out in early 1998. An increase in central government grants to local government in 1998 will enable local government employment to remain unchanged or increase slightly. In parallel with rising employment, extensive measures to limit the supply of labour have been adopted. These measures include an initiative to increase the duration of regular education, which implies that the number of education places is estimated to increase by between 20,000 and 30,000 annually up until the year 2000. The effect on the supply of labour will not be as marked, however, for a number of reasons: for example, some people will continue to work part time, thus remaining in the labour force. Also the measures aimed at older people (60–64 years), e.g. "temporary retirement benefit" for older, long-term unemployed people, imply a reduction in labour supply. Rising employment and decreased labour supply mean that unemployment will decline somewhat between 1997 and 1998 to less than 8%. An additional 4.5–5% of the labour force are projected to be in labour market programmes. Thus, at least around 12% of the labour force is expected to be either unemployed or in labour market programmes.

Table 2: Outlook on the labour market up to and including 2000 (in 1,000 persons)

	Level 1996	Changes 1996–1998	Changes 1998–2000
Labour supply (16–64 years)	4,310	–42	6
– of which employed[1]	3,963	–9	129
– of which registered unemployed	347	–33	–123
In labour market programmes outside the labour force	155	7	–10
Educational initiative	49	63	29
Various[2]	1,019	–8	12
Total	5,533	20	37

1 Consists of people employed in the regular labour market plus those in labour market programmes and in the labour force.
2 Students, home workers, early retirement, etc.

Source: Ministry of Finance (1997).

The short-term forecast by the National Labour Market Board (1997b) is on a somewhat more detailed level as regards regional development, for example, and the differentiation of employment by type of contract, gender and skills. According to this forecast, the increase in employment will occur primarily in urban regions, while the development in sparsely populated areas is not as positive. The rise in employment is (at least initially) dominated by fixed-term contracts. Most of the new jobs are within areas dominated by male employment. Further, the employment increase will not benefit the low skilled, rather it is highly skilled people, especially those with a post-secondary education, who will be in demand. One fundamental problem is that too few people are enrolled in courses focusing on civil engineering and IT to meet demand.

In both the NIER (1997a) and Ministry of Finance (1997) reports, the outlook as concerns the labour market after 1998 is quite favourable, with a slight increase in employment

and a falling unemployment rate. Table 2 presents key figures on projected annual changes from the Ministry of Finance (1997)[2]. Although the goal of "halving unemployment" (from 8% to 4%) by the year 2000, which has been formulated as a target by the government, is not attained in either report, the projection by the Ministry of Finance is more optimistic (4.5%) than that by the NIER (7.1%). In both reports, an additional 4–4.5% of the labour force are projected to be in labour market programmes. Employment is forecast to rise by around 3% during the period 1998–2000 in both reports (an additional increase of around 2% to the year 2002 is projected by the NIER). The entire increase in employment is expected to take place in the private sector, while employment in the public sector is expected to stagnate. One of the most important assumptions for the weak but positive employment development in both reports is an improvement in the functioning of the wage-determination process, resulting in wage increases in parity with developments in competitor countries. The Ministry of Finance also stresses the importance of the major educational initiative and other unemployment-reducing measures achieving the intended significant effects on unemployment (see Table 2).

The starting points in the four alternative scenarios presented by the National Labour Market Board are the following. In the "best" scenario, around 300,000 new jobs are created by 2000 – mostly within the private sector. In the "worst" scenario, around 250,000 jobs are destroyed, in both the private and public sectors. In the "in-between" scenarios, 125,000 and 25,000 jobs are created, respectively, mostly within the private sector. Despite the different labour market consequences that these scenarios predict, there are some common features:

1. unemployment will increase among the following groups: older people, the disabled and people with a brief educational background – the latter concerns women especially;
2. the share of unemployed non-Scandinavians will remain constant.

Table 3: Structural change 1990–2010: average annual change (%)

	Value added[1]	Employment[2]
Production of goods	2.1	–0.2
– capital-intensive	1.3	–0.8
– labour-intensive	0.8	–1.2
– knowledge-intensive	4.5	1.6
– protected	1.1	–1.2
– energy	1.3	1.3
Production of services	1.8	0.4
– housing	0.5	0.9
– labour-intensive	2.5	0.1
– knowledge-intensive	1.6	0.8
Private sector: total	2.0	0.1
Public sector	–0.1	–0.2

1 At factor values.
2 Hours worked.

Source: The 1995 Medium-Term Survey.

The main differences between the labour market outcomes of the different scenarios are:

1. only in the "best" alternative does structural unemployment decrease;
2. regional imbalances increase in the "in-between" scenarios;
3. youth unemployment is much higher in the "worst" scenario than in the "best";
3. only in the "best" scenario does the market for jobs in which women are strongly represented improve, while the market for male-dominated jobs improves (to a varying degree) in all alternatives except the "worst".

The different scenarios in *The 1995 Medium-Term Survey* indicate that the key to a favourable economic development is an expansion of private-sector employment. The downward historical trend for this sector's share of overall employment would thus be broken. The components of the projected structural change for 1990–2010 in the reference scenario are given in Table 3.

The whole of the net increase occurs in knowledge-intensive industries and the service sector. However, the statistical distinction between "industry" and "services" is less clear-cut in practice. Industrial growth, not least in the knowledge-intensive sector, is interrelated with large parts of the service sector. Small and medium-sized firms, not least in the service sector, are crucial for growth. The Survey emphasises the availability of risk capital to small firms as a crucial issue in this context.

Education and training are critical factors. With the major changes under way in business activities, traditional labour market training will not suffice. Instead, it is the regular educational system that will play a key role in preparing large groups of the labour force for new activities and requirements. Traditionally, labour market policy is designed primarily to cope with cyclical fluctuations. If the recovery takes time, the tasks for policy will become broader and deeper. The measures must promote occupational and geographical mobility and help maintain and renew the skills and qualifications of an appreciably larger share of the labour force than before. The Survey suggests that the supply of labour skilled in technology and the natural sciences will hardly meet demand in the coming years.

The Survey also emphasises the importance of moderate growth of labour costs (wages, taxes and social insurance contributions) in order to make it easier to utilise the potential

2 The reason the corresponding figures from NIER (1997a) are not included is that they are based on the penultimate short-term forecast in the same publication. The latest short-term forecast from NIER contains no medium-term outlook.

for growth. The pace must be set by productivity growth. The redistribution of resources that adjustment entails may lead to sectoral differences in wage determination, which is critical for ensuring a sustained upswing as well as for facilitating structural change.

When the Survey was written (in 1994 and earlier), the fiscal deficit was growing rapidly. Therefore, the Survey stresses throughout the importance of improving the state of public finances. The recovery in the coming years is conditional on the development of public finance, above all because of its impact on the rate of inflation and the interest-rate differential to the rest of the world. In fact, the rapid growth in public debt petered out after 1995 and is no longer alarming.

Conclusions

Some factors of major importance for a favourable development of the labour market have been pinpointed by these forecasts and scenarios. One is the importance of knowledge-intensive industries and of the service sector – especially of small and medium-sized enterprises – for employment growth. Another is the need to raise the educational level of the work force and to increase the number of people with technical qualifications – especially in information technology – and education in the natural sciences. If employment starts to increase, a shortage of these labour categories would imply a serious bottleneck. Another risk factor that may hamper growth will arise if wage trends in Sweden are not compatible with those in competitor countries. Having said that, not even in the most optimistic scenarios does employment pick up considerably. The risk of marginalisation in the labour market and of social exclusion for the unemployed is still high for people with a brief education, low-skilled workers and non-Scandinavian citizens.

In closing, it should be mentioned that none of the reports mentioned consider the possible effects on the labour market of Sweden joining or not joining the EMU. Earlier in 1997, an extensive study, *Sverige och EMU* ("Sweden and EMU"), on the impact of possible EMU membership on different aspects of the Swedish economy was published. The study was undertaken by a government commission consisting of five economists from the academic sphere. As a part of the project, 21 background reports were written by various experts. The aim was to survey existing knowledge and to highlight specific areas where more research was needed. Lundborg (1997) specifically analyses the consequences for the Swedish labour market. One of the main conclusions is that EMU participation requires a high degree of nominal wage flexibility and international labour mobility, and that it is likely that neither nominal wage flexibility in Sweden nor international labour mobility are sufficiently high to avoid major labour market problems should the economy be hit by a shock, e.g. a major change in export prices.

Anna Thoursie

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United Kingdom

Forecasting in the United Kingdom

Most economic forecasts in the UK are short term and derived from macroeconometric models of varying methodology, complexity and underlying assumptions[1]. The core official forecasts are produced by HM Treasury[2] (the UK Finance Ministry), which provides regular summaries of its forecasts and comparisons with those of independent forecasters[3]. Most models do not make detailed labour market or employment forecasts, but simply give aggregate values of employment and unemployment. The most important exceptions, providing employment forecasts over a longer time period and/or at a more disaggregated level (by occupation, sector, etc.) are:

- The *Institute for Employment Research* (IER): publishes annual employment forecasts[4] (most published forecasts have a time horizon of five years, but its models currently forecast to 2010) by gender, age, employment type, region, occupation, industry and qualification level. IER forecasts are based on Cambridge Econometrics' macromodel (see below), supplemented by sub-models allowing disaggregation by occupation and employment status.
- The *National Institute of Economic and Social Research* (NIESR): produces independent short-term macroeconomic forecasts for the UK (the most recent ran from mid-1997 to the end of 1998; cf. Sheldon & Young 1997). In addition, it produces medium-term (five-year) forecasts of the main variables (including aggregate employment and unemployment).
- *Business Strategies Limited* (BSL): a private consultancy which carries out disaggregated employment forecasts for the Department for Education and Employment (the UK Labour Ministry) at regional and sub-regional level, broken down by industrial sector, occupation, gender and employment type (cf. Business Strategies Limited 1996).
- *Cambridge Econometrics:* operates the most detailed model of the UK economy, with disaggregation at the level of 49 individual industries. Most important for employment and labour market analysis are its industrial and regional forecasts, which currently go to the year 2010[5].
- Official demographic projections are produced by the *Government Actuary's Department*, covering births, deaths, migration, and population estimates by age and gender. The current forecasts are 1994-based[6], and run to 2034, although summary data for 2035–2064 are also available. In addition, the Office for National Statistics (ONS) and the DfEE derive labour force forecasts from these population projections (the latest cover 1997–2006[7]).

Main forecasts and trends

Demographic trends

Official population projections (cf. Table 1) show the UK population growing by 2.4 million (4%) over 1994–2014, with the working-age population growing by a similar amount, such that the proportion of the population of working age remains constant at 61%.

Similar patterns are evident for men and women. Natural population growth accounts for slightly more than half the change, with birth rates exceeding death rates by 50,000 to 60,000 p.a. for most of the period, whilst net immigration is forecast to run at around 50,000 p.a. from 1999–2009 (having fallen from twice this level in the early 1990s), and then to fall further to 25,000 p.a. by 2014.

The population is ageing, and the forecast stability in the share of the population of working age results from the decline in the share of the under-16 age group being offset by the growing share of the post-retirement age group. At the same time, the population of working age itself is also ageing.

Labour supply

The implications of this ageing population for labour supply and for aspects of social policy (through the dependency ratio) depend crucially, however, on trends in economic activity rates.

The overall activity rate is forecast to remain practically constant (Figure 1), but this conceals important gender differences, continuing the historical trend towards increasing female activity rates and declining male rates. Activity rates for women aged 20 and over are projected to increase (between 1996 and 2006), especially in the age group 25–34 (8%) and in the age groups 45–54 and 60–64 (5%). For men, slight falls in activity rates are projected.

1 They also vary in geographical coverage, with some applying to the UK as a whole, others covering only Great Britain (i.e. excluding Northern Ireland) and others covering individual countries of the UK (e.g. the Fraser of Allender Institute produces forecasts for the Scottish economy).

2 For details of the Treasury model, cf. HM Treasury (1994).

3 The most recent report includes the forecasts of 36 organisations; see HM Treasury (1997).

4 See Lindley & Wilson (1996) and Heijke (1994) for an account of IER's approach.

5 The latest versions are Cambridge Econometrics (1997a) and (1997b).

6 The most recent projections for Great Britain were published in ONS (1996).

7 The projections are given in Ellison et al. (1997) and the methodology in Houston (1997).

Table 2 shows the net effect of these changes in population and activity rates on the size and composition of the labour force (Great Britain only). Key features are:

- Following a decline (associated with the recession) from a peak of 28.2m in 1990 to 28m in 1996, the labour force will increase each year to be 1.2m higher by 2006 (0.9m of the increase being accounted for by women, who will account for 45% of the labour force by 2006).
- The labour force in 2006 will be older than in 1995, with a projected rise of 2.3m aged 35 and over, and a projected fall of 1.1m among those under 35.

Employment

Forecasters generally concur in predicting that 1996–2006 will be a period of steady employment growth (Table 3); for instance, BSL forecasts that employment will reach nearly 27m by 2006, an increase of 1.6m (6.1%) over the decade.

At the time of writing, the most recent (short-term) forecasts are the most optimistic, taking account of the UK's current strong economic growth (although the high exchange rate is expected to hit manufacturing employment) and the effects of new job-creation programmes. After the introduction of the Jobseekers Allowance in late 1996[8], unemployment fell faster than employment was rising; most forecasters see this effect as temporary, however, and in the medium term, unemployment will fall slower than employment increases because the labour force is growing (cf., for example, Sheldon & Young 1997).

Unemployment

Whilst most macroeconomic models forecast the path of total unemployment, there are no reliable forecasts of the detailed composition of unemployment (by age, gender, occupation, etc.). The forecasts all predict a continuing decline in unemployment levels in the short to medium term, but vary in their assumptions about macroeconomic policy and circumstances. In particular, recent forecasts vary in the extent to which they take into account new labour market measures, notably the introduction of the JSA and the Labour government's "New Deal" programme targeted at youth and long-term unemployed adults. Finally, most forecasts concentrate on "claimant unemployment" rather than unemployment according to the ILO definition (currently 20% higher than the claimant level). A selection of the main unemployment forecasts is shown in Table 4.

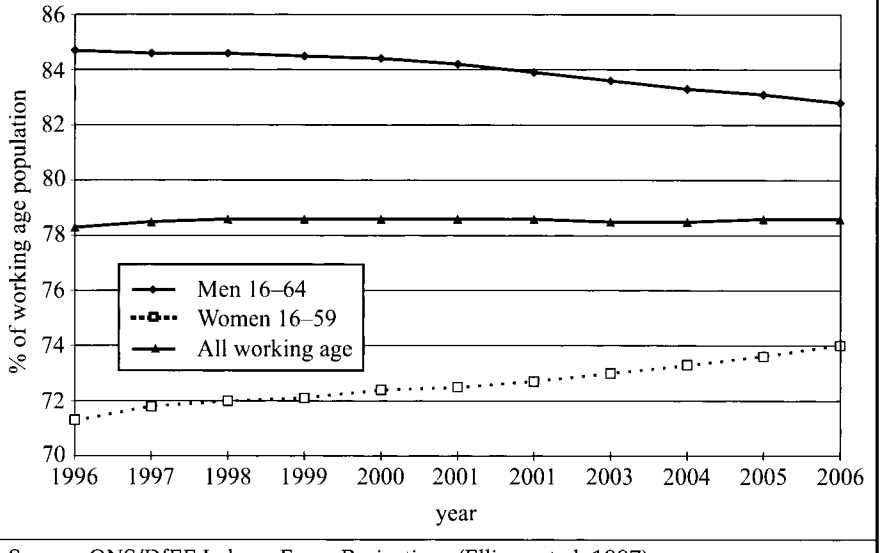
Table 1: Population projections, 1994-2014 (United Kingdom)

	Mid-year population estimates (thousands)			
	1994	2004	2014	% change 1994–2014
Total	58,395	59,802	60,752	4.0
Working age*	35,689	37,106	37,307	4.5
Working age as % of total	61.1	62.0	61.4	0.5
Males				
Total	28,592	29,544	30,171	5.5
Working age*	18,687	19,538	19,840	6.2
Working age as % of total	65.4	66.1	65.8	0.6
Females				
Total	29,803	30,259	30,581	2.6
Working age*	17,002	17,568	17,467	2.7
Working age as % of total	57.0	58.1	57.1	0.1

* Working age is 16–64 for men, 16–59 for women.

Source: Government Actuary's Department: 1994-based population projections.

Figure 1: Projections of activity rates, 1996–2006 (Great Britain)



Source: ONS/DfEE Labour Force Projections (Ellison et al. 1997).

Sectoral structure of employment

All major forecasts (Table 5) show a continuation of a trend evident for several decades, namely an absolute and relative decline in primary- and secondary-sector employment, and growing service-sector employment.

BSL's forecasts show that for 1996–2006 *financial and business services* will gain around 750,000 jobs, and mainly public services

8 For a description of the JSA, see the article on UK labour market policy in "Trends", No. 28, pp. 69–75.

Table 2: Projected changes in activity rates by age and gender, 1996–2006 (Great Britain)

	% change in activity rate between 1996 and 2006											
	16–19 years		20–24 years		25–34	35–44	45–54	55–59	60–64	65–69	65+	70+	All ages
	Students	Non-students	Students	Non-students									
Men	6.9	1.4	5.3	–0.3	–1.5	–1.4	–1.0	–2.3	–0.4	–0.5		–1.8	–1.9
Women	3.5	–2.7	5.9	3.8	7.7	0.7	4.5	1.0	5.4		0.1		2.8
All	5.2	0.4	5.6	1.7	3.1	–0.3	1.8	–0.6	2.6		–0.1		0.6

Source: ONS/DfEE Labour Force Projections (Ellison et al. 1997).

around 800,000. Increases are also expected in *construction and distribution and hotels and catering*, whilst a decline of 1.2% p.a. is forecast in *manufacturing*, around half the rate of decline experienced in the 1980s.

Occupational structure of employment

The main forecasts for occupational change (Table 6) show a continuation of the trend towards growing levels (and shares) of employment in managerial, professional, technical and sales occupations, and falls in clerical and secretarial jobs and most manual occupations.

BSL forecasts for 1996–2006 show the fastest growth rates in *professional occupations* (average 1.3% p.a.), *personal and protective service occupations* (1.5%), *managers and administrators* (1.0%) and *associate professional and technical staff* (1.4%). As a result, managerial, professional and technical occupations will account for almost 2 in 5 jobs by 2006. *Personal and protective services* are the only low-skill occupations where significant growth is forecast; the projected rate of increase to 2006 will mean a further 420,000 jobs created. *Sales occupations* are expected to see more moderate growth of around 230,000 jobs.

These shifts in occupational structure are being driven both by the changing sectoral structure of employment discussed above, and by a changing balance of occupations within sectors.

Gender, working time and contractual arrangements

Continuing growth in female activity rates is reflected in the forecast for the gender composition of employment (Table 7). In 1996, 50% of employees were women, and this will rise to 52% by 2006, although higher male numbers in self-employment mean that men will still outnumber women in overall employment (between 1996 and 2006 the female share of total employment is projected to increase from 46% to 48%).

Self-employment (which grew faster in the UK than in any other EU country in the 1980s) is forecast to continue to rise (Table 3), with BSL forecasting 24% growth over 1996–2006 (almost 800,000 jobs); by 2006, self-employment will represent over 16% of all employment.

Women's employment will continue to benefit from the ongoing shifts in sectoral and occupational structure, with some 730,000 of the 1.1m extra jobs in managerial, administrative, professional, associate professional and technical occupations during the period 1996–2006 going to women (BSL). This significant growth in the penetration of high-level occupations by women reflects their growing levels of qualification, but the forecast depends on the continuing breakdown of traditional gendered patterns of recruitment and promotion within organisations. Most of the growth in sales occupations of around 230,000 jobs will also go to women, although traditional, low-skill areas of female employment, notably clerical and secretarial occupations, will see some job loss over the period.

The UK's high levels of *part-time employment* are expected to increase further, again mainly benefiting female employees. This reflects employment shifts towards sectors with high levels of part-time work (retailing, hotels, catering, financial services, etc.), as well as growing use of part-timers in these and other sectors (driven by cost pressure to

Table 3: Selected short- and medium-term employment forecasts (United Kingdom)

Organisation	Date of forecast		Employment in millions		
			1996	2001	2006
BSL	Oct 1996	Employees	22.099	22.554	22.867
		Self-employed	3.323	3.771	4.109
		Military	0.178	0.175	0.175
		Government	0.207	0.205	0.198
		Total	25.807	26.705	27.349
IER	Dec 1996	Employees	22.249	23.198	
		Self-employed	3.376	3.647	
		Total	25.625	26.845	
NIESR	Jul 1997	Total	25.550		

Source: Various – cf. Selected bibliography.

Table 4: Selected short- and medium-term claimant unemployment forecasts (United Kingdom) (in millions)

Organisation	Date of forecast	1996	1997	1998	1999	2000	2001	2006	2010
BSL	Oct 1996	2.121 7.6%					2.058 7.2%	1.990 6.8%	
IER	Dec 1996	2.1					1.8	1.5	1.5
Cambridge Econometrics	Jun 1997	2.1	1.7	1.6	1.6	1.6	1.5	1.5	1.5
NIESR	Jul 1997	2.1 7.6%	1.6 5.8%	1.4 5.0%	1.4	1.3	1.3		

Source: Various – cf. Selected bibliography.

Table 5: Forecast sectoral structure of employment (United Kingdom)

Organisation & date of forecast		1996 level (000s)	1996 share (%)	2001 level (000s)	2001 share (%)	2006 level (000s)	2006 share (%)
BSL	Primary & utilities	809	3.2	688	2.6	609	2.3
Oct 1996	Manufacturing	4,171	16.4	3,913	14.9	3,676	13.6
	Construction	1,641	6.5	1,676	6.4	1,691	6.3
	Distribution, hotels	5,650	22.2	6,042	23.0	6,364	23.6
	Transport	1,479	5.8	1,470	5.6	1,425	5.3
	Financial & business	4,273	16.8	4,683	17.8	5,020	18.6
	Mainly public services	7,402	29.1	7,853	29.8	8,192	30.4
	All industries	25,423	100.0	26,325	100.0	26,976	100.0

Source: BSL (1996).

Table 6: Forecast occupational structure of employment (United Kingdom)

Organisation & date of forecast		1996 level (000s)	1996 share (%)	2001 level (000s)	2001 share (%)	2006 level (000s)	2006 share (%)
BSL	Managers	4,198	16.5	4,410	16.8	4,604	17.1
Oct 1996	Professional	2,424	9.5	2,610	9.9	2,756	10.2
	Assoc. prof. & technical	2,512	9.9	2,724	10.3	2,885	10.7
	Clerical & secretarial	4,036	15.9	4,057	15.4	4,011	14.9
	Craft & skilled manual	3,141	12.4	3,085	11.7	3,024	11.2
	Personal & protective	2,531	10.0	2,745	10.4	2,949	10.9
	Sales occupations	1,911	7.5	2,050	7.8	2,142	7.9
	Plant & machine	2,571	10.1	2,543	9.7	2,520	9.3
	Other occupations	2,099	8.3	2,101	8.0	2,085	7.7
	Total	25,423	100.0	26,325	100.0	26,976	100.0

Source: BSL (1996).

match staffing to workload fluctuations, and pressure to respond to the working time preferences of parts of the growing female work force). Between 1981 and 1996 the growth in part-time work accounted for 1.8m extra jobs, with the share of part-timers increasing from 21% to 29%. BSL forecasts a further increase to 31% by 2006, when part-time employment will account for more than 4 in 10 employees in distribution, hotels, catering and mainly public services.

Temporary work, although accounting for a small proportion of total employment, has grown (to 7.3% of the total in 1996, compared with 5.3% in 1985), particularly since 1992. There are few forecasts of future temporary work trends, an exception being IER, which has estimated changes over the period 1996–2001, suggesting that temporary employment will grow much faster than permanent employment (cf. Purcell 1996) (the largest proportional

Table 7: Employees by gender and working time				
Organisation & date of forecast	Employees (000s)	1996	2001	2006
BSL Oct 1996	Male employees	11,130	11,087	11,080
	males as % of all employees	50.4	49.2	48.5
	full time	9,827	9,641	9,554
	part time	1,303	1,446	1,526
	part time as % of males	11.7	13.0	13.8
	Female employees	10,969	11,468	11,787
	females as % of all employees	49.6	50.8	51.5
	full time	5,852	6,061	6,167
	part time	5,117	5,406	5,619
	part time as % of females	46.6	47.1	47.7
	All employees	22,099	22,554	22,867
Source: BSL (1996).				

growth being in professional, skilled construction and protective service occupations, and the largest absolute increase in personal service and clerical occupations).

Employment and labour market policy issues

The various forecasts of employment trends have a range of likely implications (direct and indirect) for employment, labour market and social protection policies. We outline briefly here some of the main ones, most of which are already influencing policy design in the UK.

First it is likely, although labour force growth will continue, that strong employment growth will continue to reduce unemployment. Registered unemployment is currently at its lowest level since 1980, and in some regions (notably the South East), there is evidence of labour market overheating, with reports of skill shortages; vacancies reported to the Employment Service are also at their highest level since 1980. If the forecasts are correct, the need for measures to tackle geographical and occupational mismatches between labour supply and demand will grow. Raising the quality of the human capital stock is certain to remain a key policy objective, and existing targets to increase the proportion of the work force with work-related qualifications and to raise education participation will be intensified. It should be noted that the traditional view that skill deficiencies are a constraint on UK economic growth is increasingly being challenged, with some authors arguing that the rapid recent growth in qualifications has been more than that required by technological change and the shift to higher-level occupations and has resulted in "credentialism", with a tendency for given jobs to be filled by people with ever-higher levels of qualification (Robinson & Manacorda 1997).

It is likely that certain groups will benefit much less than others from the improving labour market; long-term unemployment remains a major problem, and other significant groups will remain on the margins of or outside the labour market in the absence of policy intervention — these include members of ethnic minorities (with unemployment rates persistently twice those of the white population); disabled people (with much higher than average unemployment and inactivity rates); and individuals with literacy and numeracy difficulties (estimated at one in six of the adult population), who are likely to miss out as the labour market increasingly demands higher qualifications. Falling overall unemployment, therefore, provides both the need and the opportunity for greater targeting of active labour market policy on disadvantaged groups such as these.

The last decade has seen a growing polarisation on the UK labour market in terms of income (including the incomes of those in work) and the concentration of unemployment (with the proportion of "workless households" increasing at the same time as total unemployment has fallen). In this light, the pressure, already evident, to tackle inequality and poverty through a minimum wage, to reform the system of in-work benefits for low-paid workers and to address other aspects of the "benefit trap" will clearly increase.

The population and the work force itself is ageing, and there is less of a pension funding crisis than in some other EU Member States (the UK dependency ratio and the overall cost of state pensions are lower than the EU average). Pension reform will, nevertheless, be on the agenda if real living standards are to be maintained for the growing elderly population. Similarly, within the population of working age, the growing share of older workers, together with the well-documented existence of age discrimination by employers, will produce growing pressure for anti-discrimination legislation, matching that which applies to sex, race and disability.

The growing participation of women in the work force, and employers' need for them to enter into higher-level jobs, will further increase the need for non-discriminatory employment practices, for improved child-care provision for employed parents, and for more "family-friendly" employment practices. Similarly, the continued growth of part-time work will put the issue of the employment rights of part-time workers (compared with full-timers) into sharper focus.

A particular group of (mainly) women whose labour market participation is a growing policy concern is lone parents. This group has grown rapidly in size in recent years, and will continue to do so; the majority of lone parents wish to work, but are often economically inactive and dependent on social security, as a result of benefit traps exacerbated by the high cost and low availability of child care. Initiatives to support the labour market entry of this group will form an important part of developing labour market policy in the UK.

Despite employment growth, job insecurity remains a topic of political

concern in the UK, reinforced by the continued growth of "flexible" forms of work. As increasing proportions of the work-force experience more frequent job change, with spells of temporary work, self-employment, etc., the need for adaptation of the institutional infrastructure (especially the training/education system and the social security/pensions system) to an increasingly flexible labour market becomes more evident. In the training field, the emphasis will increasingly be on "lifelong learning" and training for "employability" rather than for specific occupations, whilst in the pensions/social security field, the need to ensure that "flexible" workers are adequately covered will become more acute.

Nigel Meager & Ceri Evans

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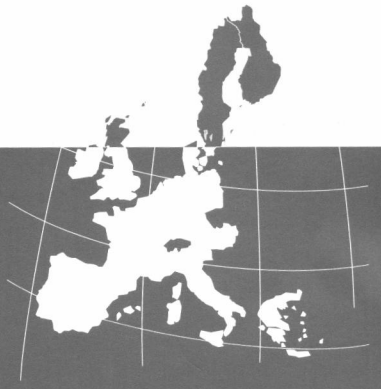
European Employment Observatory



The aim of the European Employment Observatory is to promote the multilateral exchange of information on labour markets and labour market policies between EU Member States and to produce and disseminate quality analyses and research on relevant issues for employment and labour market policy.

The European employment strategy adopted by the European Council in Essen in December 1994 imposed new demands on the Observatory. In particular, it is expected to contribute effectively to the task of monitoring the progress of labour market reforms that are in line with the common strategic goals. Following the changes introduced in 1996 to cope with these new challenges and tasks, the Observatory now consists of two networks MISEP (Mutual Information System on Employment Policies) and SYSDEM (System of Documentation, Evaluation and Monitoring of Employment Policies) and a new RESEARCH advisory group.

The main products of the networks, which consist of members of the national labour market administrations (MISEP) and independent researchers (SYSDEM, RESEARCH) and are administered by a common secretariat, are the following:

inforMISEP Policies
This series reports four times a year on recent labour market policy developments in Member States. Following a summary drawing on the five recommendations for an integrated European employment strategy, the main section of "Policies" consists of the national reports supplied by the correspondents. Since 1993 "Policies" has also included a longer article ("Focus"), which is the responsibility of the Secretariat; "Focus" discusses a labour market or employment policy-related topic and often extends to non-Member States.

Basic Information Reports
These are comprehensive national reports on all EU member countries. They are updated every two years and report on public labour market institutions (ministries and employment services), the statutory bases for labour, labour market and employment policies and, in particular, "active" and "passive" labour market policy measures; details of information and research institutions dealing with employment policy are also provided.

Tableau de bord
The "Tableau de bord" is a synoptic overview of the labour market and employment policy measures implemented by the Member States, classified according to the five policy areas recommended at Essen.

Trends
This main product of the SYSDEM network appears twice a year and provides a comparative and indepth overview of selected policies and developments in the labour markets of the Member States.

RESEARCH report
An annual report is to be published by the RESEARCH network in the form of a study of a selected labour market or employment policy topic.

Electronic Documentation System
Large parts of the information contained in the publications are also available on CD-ROM, the ERSEP (Electronic Retrieval System on Employment Policies) database, and are accessible via Internet http://www.ias-berlin.de.